

SIGNIFICANT HEALTH SUPPORT NEEDS ACADEMY



Table of Contents

Revised 08-12-02

SIGNIFICANT HEALTH SUPPORT NEEDS ACADEMY i

Academy Introduction	vii
Significant Health Support Needs Academy	ix

Module A: Receiving Health-Related Services and Procedures in the School Setting..... 10

A. Energizer: Getting to Know You	11
B. Module Goals	11

<i>Goal 1: Identify laws that guide health-related services in schools.</i>	<i>12</i>
1.1 Activity: Health-Related Services and Schools	12
1.1.2 Lecture: Health-Related Services and Schools: Key Points	12
1.2 Lecture: Laws and Health-Related Services in Schools	12
1.3 Lecture: Influencing Factors	15
1.4 Lecture: Technologically Dependent	15

<i>Goal 2: Identify services in schools designed to meet the needs of students who have significant health support needs.</i>	<i>17</i>
2.1 Activity: Essential School Services	17
2.1.2 Discussion: Further Understanding Essential School Services	18
2.2 Lecture: Defining Essential School Services	19

<i>Goal 3: Describe topics regarding funding, new roles, training, and liability.</i>	<i>20</i>
3.1 Discussion: Issues and Concerns	20
3.2 Lecture: Funding	20
3.3 Lecture: Facilities	21
3.4 Lecture: New Roles and Responsibilities	21
3.5 Lecture: Training	22
3.6 Lecture: Liability	22

<i>Goal 4: Recognize the process of developing a health care plan.</i>	<i>24</i>
4.1 Lecture: Developing a Health Care Plan	24
4.2 Activity: Health Care Plan Guidelines	25
4.2.2 Discussion: Key Points in the Health Care Plan Process	25

<i>Goal 5: Identify how to facilitate increased levels of participation</i>	<i>26</i>
5.1 Lecture: Assisting Students in the School Setting	26
5.2 Activity: Daryl, My Brother	26

5.2.2 Lecture: Pre-Skills	27
5.3 Lecture: A Functional Approach to Assisting Students	27
5.4 Lecture: Partial Participation	29
Module A Handouts	32
Module A: Receiving Health-Related Services and Procedures in the School Setting	33
Health-Related Services and the Public Schools	34
Quality Health Care	35
School Nurse	36
Health Care Plan	37
Legal Responsibilities	38
Influencing Factors	40
Essential School Components	41
Adequate Funding	42
Availability of Appropriate Facilities	43
New Roles and Responsibilities for School Personnel	44
Lack of Appropriate Training	45
Legal Liability Issues	46
Developing a Health Care Plan	47
Health Care Plan Guidelines: Parent	48
Health Care Plan Guidelines: School Nurse	49
Health Care Plan Guidelines: Physician	52
Health Care Plan Guidelines: Administrator	53
Daryl, My Brother	55
Module A Transparencies	57
Module A: Receiving Health-Related Services and Procedures in the School Setting	58
Health-Related Services and the Public Schools	59
Legal Responsibilities	60
Technologically Dependent	61
Essential School Services	62
Key Elements and Controversial Issues	63
Developing a Health Care Plan	64
Key Points in the Health Care Plan Process	65
A Functional Approach to Curriculum and Instruction	66
Partial Participation	67
Steps of Partial Participation	68
Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services	69
A. Module Goals	70

Goal 1: Identify the role of the school nurse in health-related services.	71
1.1 Lecture: The Role of the School Nurse	71
1.2 Activity: The School Nurse, Delegation, and Accountability	71
1.2.2 Lecture: Key Points Regarding the Role of the School Nurse	72
1.3 Lecture: Technical Skills Chart	72
1.4 Lecture: Commonly Delegated Procedures	88
Goal 2: Identify the role of the paraeducator in health-related services.	89
2.1 Lecture: The Role of the Paraeducator	89
2.2 Lecture: Personal Safety and Well-Being	90
2.3 Lecture: Universal Precautions	90
2.4 Lecture: Handwashing	91
2.5 Activity: Washing Your Hands	93
2.5.2 Lecture: The Importance of Handwashing	94
2.6 Lecture: Glove Usage	94
2.7 Lecture: Bodily Fluids	95
2.8 Lecture: Handling Bodily Fluids	97
2.9 Activity: Further Understanding Universal Precautions	98
2.10 Lecture: Providing Emergency Medical Assistance	99
2.11 Lecture: Priorities in Emergency Situations	99
Module B Handouts	102
Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services ..	103
Delegatory Clause of the Nurse Practice Act	104
Criteria for Delegation	105
Responsibilities as a Delegator	106
Standards for the Accountability of the School Nurse	107
Exclusions from the Rules and Regulations	108
Important Points to Remember	109
Technical Skills Chart	110
Universal Precautions	128
Handwashing	129
Glove Usage	131
Bodily Fluids	132
Guidelines for Handling Bodily Fluids	134
Paraeducators and Universal Precautions	136
Action Guide for Providing Emergency Care	138
Emergency Priorities	139
Module B Transparencies	140
Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services ..	141

Remember.....	142
The School Nurse Must.....	143
The Paraeducator Must.....	144
Universal Precautions	145
Action Guide for Providing Emergency Care	146
Emergency Priorities	147
Module C: Functions of the Body's Systems	148
A. Module Goals	149
<i>Goal 1: Identify body systems and symptoms that require referral to the school nurse.....</i>	<i>150</i>
1.1 Lecture: The Body's Systems	150
1.2 Lecture: The Cardiovascular and Respiratory System	150
1.3 Lecture: The Musculoskeletal System	151
1.4 Lecture: The Skin and Hair System	151
1.5 Lecture: The Digestive and Renal System	152
1.6 Lecture: The Central and Peripheral Nervous System	152
1.7 Lecture: The Immune System	153
<i>Goal 2: Identify guidelines related to infectious diseases in school-age children.</i>	<i>154</i>
2.1 Lecture: Infectious Diseases in Schools.....	154
2.2 Activity: Infectious Diseases and Body Systems	154
Module C Handouts	156
Module C: Functions of the Body's Systems	157
The Cardiovascular and Respiratory System	158
The Musculoskeletal System	159
The Skin and Hair System.....	160
The Digestive and Renal System	161
The Central and Peripheral Nervous System	162
The Immune System	163
Infectious Disease Guidelines for School Personnel	164
Module C Transparencies	210
Module C: Functions of the Body's Systems	211
The Body's Systems	212
The Cardiovascular and Respiratory System	213
The Musculoskeletal System	214
The Skin and Hair System	215
The Digestive and Renal System	216
The Central and Peripheral Nervous System	217



The Immune System	218
Reference List.....	219

Academy Introduction

Using the **Significant Health Support Needs Academy** transparency (T1), review the modules with the paraeducators before beginning the academy.

This academy does not address training for CPR, the Heimlich Maneuver, or emergency response to school-wide catastrophes. Each school district typically provides those types of training through departments, such as transportation, risk management, or the central nurse's office.

This academy was developed based on guidelines developed through a grant from the Colorado Department of Education and the Colorado Department of Public Health and Environment. Many of the handouts were developed by the same group and are provided for immediate use or as a template to refer to when determining which publications are needed when teaching this academy in other states. Similar material resources for each state can be accessed through The Association of State and Territorial Health Officials website (<http://www.astho.org/environmental/documents.html>), under the Directory of Environmental Health Services, State Contacts links. This website provides a directory of names and phone numbers related to public health and environment for each state. Contact the appropriate individual(s) in the state this academy is being taught in and obtain the materials and information that reflect those used as handouts throughout this academy.

In those states with nurse delegatory laws, ***Module B: The Roles of the School Nurse and Paraeducators in Health-Related Services*** will be appropriate. In those states that do not have a mandated nurse delegatory clause regarding public schools, it will be necessary to research the policies of the particular school district and adjust the module accordingly.

The PAR²A Center, the developers of the Significant Health Support Needs Academy, fully supports the practice of professional nursing within the

school setting where designated by law. Any health related procedure must be the exclusive domain of the school nurse, who is licensed to practice professional nursing within that state, if that individual state has mandated the dispensing of that service by a licensed professional nurse. In those states that have made such designations, the school nurse is responsible for the assessment, planning, implementation, and evaluation of the student in the school setting. All health-related procedures, in these states, must be delegated by the school nurse.

It should be noted that in some state there is a distinction between a school nurse and a registered school nurse. This academy uses the term “school nurse” and makes no such distinction. If this academy is being taught in a state with such a distinction, the instructor will need to adjust the content accordingly, defining the respective job responsibilities accordingly.

A reference list is provided at the end of this academy, should you need to access sources for additional information.

Significant Health Support Needs Academy

SgHlth-T1



Module A: Receiving Health-Related Services and Procedures in the School Setting

- *Identify laws that guide health-related services in schools.*
- *Identify services in schools designed to meet the needs of students who have significant health support needs.*
- *Describe topics regarding funding, new roles, training, and liability.*
- *Recognize the process of developing a health care plan.*
- *Identify how to facilitate increased levels of participation.*

Module B: The Roles of the School Nurse and Paraeducators in Health-Related Services

- *Identify the role of the school nurse in health-related services.*
- *Identify the role of the paraeducator in health-related services.*

Module C: Functions of the Body's Systems

- *Identify body systems and symptoms that require referral to the school nurse.*
- *Identify guidelines related to infectious diseases in school-age children.*

Module A: Receiving Health-Related Services and Procedures in the School Setting

Significant Health Support Needs Academy

Module A: Receiving Health-Related Services and Procedures in the School Setting



A. Energizer: Getting to Know You

Introduce yourself to the class and share a little about your experiences related to significant health support needs. Have the paraeducators introduce themselves and briefly tell where they work and what they do.



B. Module Goals

Using the **Module A: Receiving Health-Related Services and Procedures in the School Setting** handout and transparency (H1/T1), review the goals of the module.

1. Identify laws that guide health-related services in schools.
2. Identify services in schools designed to meet the needs of students who have significant health support needs.
3. Describe topics regarding funding, new roles, training, and liability.
4. Recognize the process of developing a health care plan.
5. Identify how to facilitate increased levels of participation.



Note to Instructor: In some states there is a distinction between a school nurse and a registered school nurse. This academy uses the term “school nurse” and makes no such distinction. If this academy is being taught in a state with such a distinction, the instructor will need to adjust the content accordingly, defining the respective job responsibilities accordingly.



Note to Instructor: Some paraeducators attending this class may not have experiences in school settings that include assisting or having knowledge of students who have significant health-related needs. Some paraeducators may have been in the uncomfortable position of being asked to assist with procedures for which they are not qualified or have not been trained to assist with. Still others may have had multiple opportunities for training and are frequently part of the school team called upon to assist with various students.



Goal 1: Identify laws that guide health-related services in schools.



1.1 Activity: Health-Related Services and Schools

Paraeducators will participate in an activity that provides an opportunity to gain a better understanding of health-related services and public schools.



1.1.1 Steps

- Have the participants break into four groups by counting off by four: all 1's together, all 2's together, all 3's together, and all 4's together.
- Distribute the appropriate handout as follows:
 - ➔ Group 1: **Health-Related Services and Schools (H2)**
 - ➔ Group 2: **Quality Health Care (H3)**
 - ➔ Group 3: **School Nurse (H4)**
 - ➔ Group 4: **Health Care Plan (H5)**
- Instruct the groups to read and discuss their assigned handout.
- When finished, have the participants form new groups, ensuring each contains at least one member from each of the original groups.
- Have the participants share the information and discussion regarding the topic from their original group with their new group members.



1.1.2 Lecture: Health-Related Services and Schools: *Key Points*

Present and review the **Health-Related Services and Schools** transparency (T2).

- Students who were formerly institutionalized for health care and education are now receiving their health care and education during class hours in the public school setting.
- Health care is best provided in the school through assessment, planning, and monitoring by the family physician and the school nurse.
- Nurses may delegate tasks for which a license is required to unlicensed persons, providing specific criteria are met.
- It is essential to have a health care plan for students with special health care needs.



1.2 Lecture: Laws and Health-Related Services in Schools

It is no longer a question of should students with significant health-related needs

attend public school, but how to make it possible. School attendance is mandated by federal and state law. Meeting the mandates and providing a quality education in a medically safe environment is an important and complicated task.

Children and youth with special health care needs present a significant challenge to school personnel. The numbers of these young people in schools have been increasing over the past decade and will continue to do so. Under state and federal laws, public schools are required to provide educational and related services to children and youth who have medically complex conditions and/or are technology dependent. Present and review the **Legal Responsibilities** handout and transparency (**H6/T3**).

- Federal Legislation
 - ↳ Rehabilitation Act of 1973 (PL 93—112)
 - ⇒ Provides a comprehensive plan for rehabilitation services to all individuals, regardless of the severity of their disability.
 - ⇒ Section 504 of this act is a civil rights law enacted to protect individuals with disabilities that limit major life activities from discrimination, and does not require the student to be in special education to receive services. Many students with disabilities do not qualify for services in special education. They are served in regular education.
 - ↳ Education for All Handicapped Children Act (EHA) of 1975 (PL 94-142)
 - ⇒ Mandates a free, appropriate public education for all children with disabilities in the least restrictive environment. In addition, there are specific requirements to be met:
 - An individual education plan (IEP).
 - Nondiscriminatory testing and placement.
 - Parental involvement.
 - Due process.
 - Confidentiality.
 - Staff development.
 - ↳ Education of the Handicapped Act Amendment of 1986 (PL 99-457)
 - ⇒ Mandates services for preschoolers with disabilities, ages three to five.
 - ⇒ Established Part H programs to assist states in developing mandated, state-wide, interdisciplinary early

- identification and intervention services for infants and toddlers, birth to two years and eleven months.
- ↳ Individuals with Disabilities Education Act (IDEA) of 1990 (PL 101-476)
 - ⇒ An amendment to the 1975 PL 94-142 and 1986 PL 99-457.
 - ⇒ Redefines the eligibility criteria for services and mandates transitional planning for students 16 and older.
- ↳ American with Disabilities Act (ADA) PL 101-336 of 1992
 - ⇒ Protects the rights of all people of all ages with disabilities, including students in school settings who do not qualify for services in special education.
 - ⇒ Title 3 of this act covers requirements for public accommodations and commercial facilities to be accessible to persons with disabilities.
- Colorado State Legislation
 - ↳ Exceptional Children's Educational Act (ECEA) 22-20-101 of 1973 and the Rules and Regulations passed by the Colorado State Board of Education in 1992
 - ⇒ Regulates the services for children with disabilities between ages 3 and 21 who are unable to receive reasonable benefit from regular education without additional supports in the public schools because of specific disabling conditions. Children with disabilities may also include those from birth through two years of age who have a significant developmental delay and who potentially may be unable to receive reasonable educational benefits from regular education when they enter school.
 - ↳ Nurse Practice Act of Colorado, 12-38-101
 - ⇒ Regulates the practice of nursing through the Department of Regulatory Agencies with the power to enforce the provisions of the act.
 - ⇒ Senate Bill 92-96 added the Delegation of Nursing Tasks to the Nurse Practice Act in June 1992, allowing only a registered nurse to delegate nursing tasks to an unlicensed person if certain criteria are met.



1.3 Lecture: Influencing Factors

Having reviewed the legal precedents for receiving medical procedures and support in school settings, it is helpful to understand some of the factors that influenced this legislation and that continue to influence the development and provision of services in public schools.

Present and review the **Influencing Factors** handout (H7).

- Students who were formerly institutionalized for care and education are now in the public school setting.
- Laws, both state and federal, have mandated that students with disabilities be accommodated in the public school setting.
- Advanced medical technology has led to the survival of children who otherwise would have died from their illness.
- Routine early dismissal from hospitals results in many health-related procedures being done in the home and school setting.
- Implementation of health-related procedures in the home setting.
- Children with complex illnesses and health-related needs are returning to the school setting and require health procedures as part of their daily activities.
- School administrators and teachers are seeking health-related advice from the health care community. New avenues of communication and collaboration are being developed.
- School nurses (or public health nurses, in some areas) are becoming the bridge between schools and healthcare agencies.
- School nurses (with educators, healthcare persons, M.D.s, social workers, etc.) are required to develop a comprehensive plan of care for the medically fragile child and, when appropriate, train and delegate health-related procedures to be performed by a paraeducator or other school personnel.
- The management of the student who is medically fragile in the public school setting has become multiprofessional/interdisciplinary in nature, as well as dynamic and complex.



1.4 Lecture: Technologically Dependent

Emphasize that state and federal laws that support students who are medically fragile in the public school address the issue of supporting students who may be technologically dependent.

Present and review the **Technologically Dependent** transparency (T4). Being technologically dependent refers to those students who require devices or mechanical equipment to perform normal activities of daily living. There are many types of devices and equipment being used daily in schools, including, but not limited to:

- Respirators for breathing,
- Urinary catheters for urination,
- Feeding tubes for nourishment.
- Wheelchairs and walkers for movement and ambulation, and
- Medications for the prevention of infections or maintenance of health.



Goal 2: Identify services in schools designed to meet the needs of students who have significant health support needs.



2.1 Activity: Essential School Services

Paraeducators will participate in an activity that provides an opportunity to gain a better understanding of the complexity of delivering appropriate health-related services to students in public schools.



Note to Instructor: Prior to beginning this activity, cut the squares out of the **Essential School Services** handout (**H8**). You will need to ensure that enough copies of the handout are made so that there are enough squares for each participant to have one.



Note to Instructor: Throughout this academy, refer to this activity. This academy looks at various school professionals who support students that have very complex medical needs. Understanding the laws and capabilities of school personnel helps in providing enhanced services to such students.



2.1.1 Steps

- Have the participants clear a large space in the room.
- Distribute one pre-cut square from the **Essential School Services** handout (**H8**) to each participant.
- Instruct the participants to break into groups according to the squares.
 - ↳ Group 1: Wrist to Elbow
 - ↳ Group 2: Foot to Foot
 - ↳ Group 3: Elbow to Shoulder
 - ↳ Group 4: Wrist to Back
- Instruct the groups to connect themselves to their other group members in the manner indicated on their assigned square.
 - ↳ For example, the members of Group 1: Wrist to Elbow will connect themselves by each placing one of their wrists on the elbow of one other group member.
- When finished, instruct the groups to connect to each other, while maintaining their internal group connections, in the manner indicated on their assigned squares.
 - ↳ For example, Group 1: Wrist to Elbow will attach to Group 2: Foot to Foot by connecting one group member's wrist to one of Group 2's member's elbow. The group then establishes a

similar connection with Group 3: Elbow to Shoulder, and so on until all four groups are connected.

- After all groups are completely connected to each other, place a piece of crumpled paper on the floor out of the reach of the participants and a trash can several feet out of the classroom.
- Instruct the participants that their mission is to move as one group, maintaining their individual connections, to the piece of paper. They are to pick up the paper, and then move as group, again without breaking their connections, and deposit the paper into the trash can that has been placed outside of the classroom. Once finished, they are to return to the classroom, again without breaking their connections.



2.1.2 Discussion: Further Understanding Essential School Services

While participating in this activity some key elements were required. Engage the participants in a discussion regarding their experiences in this activity, using the following questions and points as a guide.

- What were some important components necessary for each group in order to complete the assigned task?
 - ↳ Possible answers include:
 - ⇒ Working together.
 - ⇒ Going slow enough for those who struggled.
 - ⇒ Communicating about how to proceed.
 - ⇒ Ensuring everyone was ready at the same time.
 - ⇒ Keeping track of everyone else and their movements.
 - ⇒ Planning for difficult parts, like getting through the door.
- What elements similar to those found in the work setting could have occurred which would have inhibited or thwarted the group's ability to complete the task?
 - ↳ Possible answers include:
 - ⇒ Arguing about the best way to approach the task.
 - ⇒ Someone wanting to be the "boss" and not understanding the opinions of others.
 - ⇒ No one willing to take a leadership role.
- How did group understanding of individual limitations impact completion of the task?
 - ↳ Possible answers include:
 - ⇒ There was no understanding.

- ⇒ The group couldn't maintain its connections.
- ⇒ The greater the awareness of the others, the more smoothly the group could work.

Point out that this activity demonstrates how any organization, including a school, consisting of many people from a wide variety of backgrounds, is required to come together to meet a common goal.

The four individual groups in this exercise represent the various trainings, licensure, and educational expertise of different groups trying to meet the school's common goal for an individual student. For example, Group 1: Wrist to Elbow could represent the school administration, while Group 2: Foot to Foot could represent the classroom teacher. In each group there are constraints and liberties that are part of how that group functions. In schools, professionals often have specific legal direction regarding what they can do and how to do it.

The challenge in the school setting is to optimize the functioning of the specific groups to meet the common goal. As we examine the provision of school services for students who have significant health needs, it is important to recognize and keep in mind the intricate structure of the many and varied services that are interacting constantly in order to maintain consistent and effective services for that student. Those services must reflect the common goals of the institution for all students, while reflecting the individual needs of students who have health impairments.



2.2 Lecture: Defining Essential School Services

Present and review the **Essential School Services** transparency (T5). The essential components in meeting the needs of students who have significant health support needs can be categorized as follows:

- *Mechanisms* within the school setting to maintain and develop orderly, professionally responsible decisions: a chain of command.
- Proper *facilities* that are equipped to meet the student's special needs: wide doors, ramps, automatic door openers, etc.
- Proper *equipment* that meets the student's needs: gloves, diapers, privacy screens, feeding utensils, etc.
- Proper *services* which specifically meet the student's needs: nursing, audiologists, social services, etc.



Goal 3: Describe topics regarding funding, new roles, training, and liability.



Note to Instructor: The information for this goal was adapted from *The Medically Fragile Child in the School Setting*, Second Edition, a publication of the American Federation of Teachers's Ad Hoc Committee on Health Care Responsibilities in Special Education.



3.1 Discussion: Issues and Concerns

The placement of students who are medically fragile into the school setting may raise various issues and concerns. Engage the participants in a discussion regarding what they see as possible issues and concerns, recording their responses on a blank transparency.

Present and review the **Issues and Concerns** transparency (T6). Issues and concerns typically fall into one of five categories.

- Adequate *Funding*
- Availability of Appropriate *Facilities*
- *New Roles and Responsibilities* for School Personnel
- Lack of Appropriate *Training*
- Legal *Liability* Issues

Review and discuss with the class their responses and which category each falls into.



3.2 Lecture: Funding

Present and review the **Adequate Funding** handout (H9).

- Adequate *Funding*
 - ➔ What about funding? Public schools with already limited funds find that:
 - ⇒ The cost of financing special education, already astronomical, is soaring.
 - ⇒ The additional funds needed to hire specialized personnel, school nurses, technical equipment, additional transportation costs, and, in some instances, the remodeling of facilities to accommodate the needs of students is unwieldy and further stresses an already

- ⇒ financially strapped school system.
- ⇒ Private insurance companies and government agencies that previously provided health care services begin to minimize their services and shift the responsibility for these medically fragile children to the public schools.



3.3 Lecture: Facilities

Present and review the **Availability of Appropriate Facilities** handout (H10).

- Availability of Appropriate *Facilities*
 - ↳ Can facilities, equipment, and conditions possibly be adequate?
 - ⇒ Students with profound levels of disability with chronic health problems are entering the public schools in increasing numbers.
 - ⇒ Facilities and conditions under which many medically related procedures must be performed are woefully inadequate.
 - For example, intrusive procedures that require objects to be inserted into the body are often performed without training and in facilities lacking privacy, hot water, or other proper sanitary conditions.



3.4 Lecture: New Roles and Responsibilities

Present and review the **New Roles and Responsibilities for School Personnel** handout (H11).

- *New Roles and Responsibilities* for School Personnel
 - ↳ What are appropriate roles and responsibilities for school personnel?
 - ⇒ As school personnel are required to perform more procedures, concerns arise regarding job descriptions and requirements, school conditions and available facilities, staff training and competencies, and liability, as well as the overall concern for providing a safe and healthy environment for all students.
 - ⇒ In many schools, health care services means that teachers, paraeducators, and other school personnel often must perform medical procedures in addition to their typical educational responsibilities.

- ⇒ Medical procedures are often performed with minimal training and supervision, without proper facilities for cleanliness and sanitation, and under conditions that raise serious concerns about quality of the care.
- ⇒ Ironically, school nurses are often among the first let go when layoffs occur. Many of these nurses have overseen several facilities. Schools should be employing more, not fewer, school nurses to address the health care needs of students with chronic health impairments.



3.5 Lecture: Training

Present and review the **Lack of Appropriate Training** handout (H12).

- Lack of Appropriate *Training*
 - ↳ What about training?
 - ⇒ Due to the decreasing numbers of nurses assigned to public schools, there is inadequate training, supervision, and evaluation of non-medical personnel who are required to perform these procedures.
 - ⇒ Performing medically related procedures in less than optimal conditions places teachers, paraeducators, and other school-related personnel in a position where they could possibly jeopardize the health and safety of students.



3.6 Lecture: Liability

Present and review the **Legal Liability Issues** handout (H13).

- Legal *Liability* Issues
 - ↳ What's legal? Who's liable?
 - ⇒ Besides the obvious concern for providing a safe and healthy environment for all students, there are other concerns that pertain to school nurses, public health nurses working in the schools, and other school employees.
 - ⇒ All medical procedures ultimately are the legal responsibility of the health professional and/or school nurse assigned to a facility.
 - ⇒ State laws, often referred to as nurse practice acts,

require that medical procedures be performed only by a person educated and licensed to practice as a registered nurse, unless he or she has trained another person and is confident in that person's ability. However, not all procedures can be delegated and each state's board of nursing makes these determinations.

- ⇒ Teachers and paraeducators are often designated to perform medical procedures by the school principal or their supervisor. In some states, this may be a clear violation of the state's nurse practice acts.



Goal 4: Recognize the process of developing a health care plan.



4.1 Lecture: Developing a Health Care Plan

Developing a health care plan takes a comprehensive team effort that requires the input and cooperation of many individuals to develop a successful health care plan for the student.

Distribute and review the **Developing a Health Care Plan** handout and transparency (H14/T7). The process of developing a health care plan consists of several steps:

- Identification of a Student with Potential Health Needs
 - ↳ Parent and/or Student
 - ↳ School Personnel
 - ↳ School Nurse
 - ↳ Student's Physician
 - ↳ Hospital Staff
- Referral to the School Nurse
- Health Care Assessment
 - ↳ Identify Physical Functioning and Health Needs
- Team Meeting to Develop the Student's Health Care Plan
 - ↳ Parent
 - ↳ Student (if appropriate)
 - ↳ School Administrator
 - ↳ Classroom Teacher (if appropriate)
 - ↳ School Nurse
 - ↳ Physician or Physician's Consultant
- Team Meeting to Make Decisions
 - ↳ Regular Education and 504 Placement, or
 - ⇒ Health Care Plan
 - ⇒ Procedure for Health Care Service
 - ↳ Referral to Special Education
 - ⇒ Goals and Objectives Support Services
 - ⇒ Health Care Plan
 - ⇒ Procedure for Health Care Service

Emphasize that the primary component in developing a health care plan is clear and open communication between all team members.



4.2 Activity: Health Care Plan Guidelines

Paraeducators will participate in an activity that provides an opportunity to gain a better understanding of health care plans.



4.2.1 Steps

- Have the participants break into four groups by counting off by four: all 1's together, all 2's together, all 3's together, and all 4's together.
- Distribute the **Health Care Plan Guidelines** handouts (**H15/H16/H17/H18**) as follows:
 - ↳ Group 1: **Health Care Plan Guidelines: *Parent* (H15)**
 - ↳ Group 2: **Health Care Plan Guidelines: *School Nurse* (H16)**
 - ↳ Group 3: **Health Care Plan Guidelines: *Physician* (H17)**
 - ↳ Group 4: **Health Care Plan Guidelines: *Administrator* (H18)**
- Instruct the groups to read and discuss their assigned handout.
- When finished, have the participants form new groups, ensuring each contains at least one member from each of the original groups.
- Have the participants share the information and discussions regarding their assigned handout.



4.2.2 Discussion: Key Points in the Health Care Plan Process

Using the **Key Points in the Health Care Plan Process** transparency (**T8**) as a guide, engage the participants in a discussion regarding each of the following points, asking the participants to share points from their group discussions.

- Identifying Data
- Source of Medical Care
- Health Problems List
- Description of Illness and/or Condition
- Specific Precautions
- Health Care Treatment Plan
 - ↳ Schedule
 - ↳ Personnel Trained
 - ↳ Procedures
 - ↳ Physician's Written Authorization
- Emergency Information
 - ↳ Person(s) to Contact
 - ↳ Back-up Plan
- Transportation Plan for Health Needs
- Re-Evaluation Date



Goal 5: Identify how to facilitate increased levels of participation



5.1 Lecture: Assisting Students in the School Setting

The first step in assisting students who have significant medical or health support needs in the school setting is the development of a health care plan, because the first and primary concern is that of safety. Safety is critical for the student and staff. The student must feel safe and the staff delivering the services must feel confident about the student's safety in order to provide the student a daily educational experience that is rewarding and appropriate for the student.

Once a system for safety has been established, the educational day of the student can be designed in such a way that the student has many opportunities to learn and be as independent as possible. An important part of any student's educational experience is to feel as much like his or her peers as possible. A dedicated staff should attempt, wherever possible, to be aware of the safety and health needs of the student without stigmatizing the student or making the illness or disability a focus for other students. An important part of the good physical health of children is positive mental health. Feeling accepted and part of the group is key in maintaining good mental and physical health for students.

Many students who have significant health-related support needs attending public schools also have cognitive or physical disabilities that further prohibit those students from participating as a fully included member of typical activities or classrooms. For those students, it becomes the responsibility of the peers, family, and school staff to support wherever and whenever possible, assisting the student toward the greatest level of participation possible.



5.2 Activity: Daryl, My Brother

Paraeducators will participate in an activity that provides an opportunity to better understand developmental and functional concepts.



5.2.1 Steps

- Have the participants break into pairs.
- Distribute the **Daryl, My Brother** handout (H19).
- Instruct the pairs to read the handout and respond to the question that follows.

- When finished, ask the pairs to share their responses, ensuring the following points are covered.
 - ↳ The things he can do are only useful in school.
 - ↳ He can't do real life tasks.
 - ↳ The things he can do are not very useful in the community, in an employment situation, or at home.
 - ↳ The things he can't do are things someone else will have to do for him if he never learns how to do them himself.
 - ↳ When other people do every day tasks for another person, it makes that person seem dependent and helpless.
 - ↳ The things he can do have no real value for getting along in life
 - ↳ The things he can do aren't the kinds of things other kids his age usually do.
 - ↳ The things he can do aren't very valuable in an economic sense (aren't job-related or income producing).
 - ↳ He can't do many of the things he would need to do in order to be even partially independent.
 - ↳ The things he can do seem to have been chosen for him and aren't among the things typical people do.



Note to Instructor: The material for this activity was adapted from A Case for Teaching Functional Skills by Preston Lewis, TASH Newsletter, December 1987.



5.2.2 Lecture: Pre-Skills

The skills Daryl has are usually considered pre-skills, the earliest skills to be acquired in the typical developmental sequence. These are the prerequisites to participating in academics and many other activities. The problem is that some individuals who have severe disabilities, like Daryl, may never master the pre-skills and, therefore, will never be taught to participate, even partially, in many real-life activities. Thus, a student may spend 12 years in school and only develop pre-skills (like understanding words) and may never have been taught any real life skills (like telling the waiter what he wants by pointing to a picture).



5.3 Lecture: A Functional Approach to Assisting Students

Some proponents of a functional curriculum say, "Pre means never." It becomes the responsibility of those developing educational programs for students with severe needs

(whether health-related, cognitive, or physical) to critically consider how each component of a student's educational experience can be built on and developed into skills that provide the greatest amount of function possible for the student. If a student's independent skills are at a prerequisite level in any area of life, it is imperative that the skills be valued and used as building blocks for greater independence.

The word "developmental" conveys the notion that many basic and sophisticated skills are learned in a natural, apparent order by typically developing children. For instance, a "developmental curriculum," as it applies to preschool programming, is a curriculum that honors the current developmental level of a particular student and helps that student gain the next skills in the sequence. It is a bottom-up model in that each task is analyzed to detect the sequence of micro-skills and to compare that sequence with the student's performance. The step just up from the student's performance level is where instruction begins.

The intent of using a developmental model with older students is to help students learn skills that they have missed or haven't yet learned. The assumption is that learning each of the steps, in sequence, will result in the individual being able to perform the final task. The problem that arises with students who have severe needs is that they tend to perform or learn more slowly. So, if it takes an individual student 1,000 trials to learn a new motor skill (like independently propelling their wheelchair) and it is estimated that in 12 years of education the student will only be provided 10,000 practice sessions, the student will be able to master 10 skills. If those 10 skills are taken from a list of micro-skills from a typical developmental sequence, the student might exhaust their 12 years of schooling with only the kind of skills Daryl has.

If it takes a student 2,000 trials to learn to maintain head control while being pulled to a sitting position (one session a day for six years) then a similar number of trials to learn to maintain sitting balance on the floor can be predicted. Continuing in this manner, using a developmental model for skill selection, the student could be 18 years old before he or she learns to push themselves up to a sitting position on the floor. Consider that he or she would be working against gravity with a body that is much larger and heavier than the body of the typical infant developing this skill at eight months of age.

The development of a functional curriculum begins by seeing the individual student as different, but not too different than typical students. The question that guides what is taught and how it is taught is, "How can we help this student and the real-life environment (school, home community, leisure activity locations, etc.) adapt to one

another?” The functional approach builds on a student’s skills, using natural events, situations, and materials to enable a student to function as independently and effectively as possible in mainstream society. The curriculum is guided by what others of a similar age choose to do, what the student prefers and chooses, and what will have to be done for the student by caretakers or assistants if he or she doesn’t learn how to do it for himself or herself.

Present and review the **A Functional Approach to Curriculum and Instruction** transparency (T9). In a functional approach to curriculum and instruction, the skills are selected according to a specific target or ultimate goal needed by the student as he or she matures into adulthood. Given the same number of practice sessions using the functional approach for selection of skills, the five skills that a student masters might be:

- Makes purchases at convenience store by handing the cashier the next highest amount and waiting for change (e.g., gives a \$10 bill for a purchase of \$8.67, holds out hand, as if expecting change).
- Selects the correct public restroom by discriminating between the symbols on the doors.
- Walks up three steps, with support of railing or hand of another person.
- Nods head “yes” or “no” to answer posed questions.
- Chooses what coat or sweater to wear depending on the weather.



5.4 Lecture: Partial Participation

One reason many students who have significant disabilities are excluded from age-appropriate activities is that they are unable to complete all the steps of a given activity independently. For example, a student may learn to take his or her right arm out of a sleeve only if help in taking the shirt off part of the way is received. Teachers may feel that a different activity should be selected, one the student can perform independently, or perhaps that someone else should do the entire task for the student.

Present and review the **Partial Participation** transparency (T10). The concept of partial participation, formulated by Lou Brown and his colleagues in the 1980s, states that individuals with severe disabilities, regardless of their limited independence or level of functioning, should be permitted to participate at least partially in chronologically age-appropriate environments and activities.

There are several ways to help students function to their maximum potential. Present and review the **Steps of Partial Participation** transparency (T11).

- Modify the Environment
 - ↳ Change the physical structure of the environment to allow the student to be more independent.
 - ⇒ Move desks in the classroom further apart so the student can get through the aisle with an assistant providing a hand for balance.
 - ⇒ Apply a non-stick surface to desks or table tops to keep objects from slipping when the student puts something down or picks something up.
- Modify the Skill Sequence of the Task
 - ↳ Change the task sequence or modification to the steps in an activity to be different from the way the student's peers without disabilities perform the same activity.
 - ⇒ A students who is unable to stand might learn to remove and put on his pants while lying down.
 - ⇒ A student with use of only one hand may open a jar by first lodging it some place, like a kitchen drawer, to hold it in place, while turning the lid with the one usable hand.
- Adapt Materials
 - ↳ Make or use portable objects, equipment, or materials to increase the student's participation in an activity.
 - ⇒ Picture cue cards for activities, such as meal preparation, shopping, making change, riding the bus, job checklists.
 - ⇒ Devices that promote self-feeding (e.g., built-up handles on spoons, suction cups on plates, cut-away cups, pizza cutter used by one hand for cutting food.)
- Provide Personal Assistance
 - ↳ Provide verbal, model, physical, or supervisory assistance.
 - ⇒ Putting a head pointer and lap-board communication system on the student before he or she can communicate.
 - ⇒ Hold a hand or arm out so the student can lean on it to stay balanced while standing, walking, sitting, etc.

When tasks cannot be taught or adapted, they must be supported. This involves having another person perform the difficult steps of a task while the student performs those that are within his or her range of abilities. This is partial participation. Partial participation is much more dignified than the alternative: exclusion from those

activities until the student can engage in them independently, if ever. It is not an option to exclude students with significant conditions from the school setting. It is the job and responsibility of the school personnel assisting these students to include them in as many activities of life, in as independent a manner as possible.

Module A Handouts

Module A: Receiving Health-Related Services and Procedures in the School Setting

1. Identify laws that guide health-related services in schools.
2. Identify services in schools designed to meet the needs of students who have significant health support needs.
3. Describe topics regarding funding, new roles, training, and liability.
4. Recognize the process of developing a health care plan.
5. Identify how to facilitate increased levels of participation.

Health-Related Services and the Public Schools

Students who were formerly institutionalized for health care and education are now receiving their health care and education during class hours in the public school setting. This was mandated in 1975 by federal law PL 94-142, Education for All Handicapped Children Act. In 1990, federal law, PL 101-476, Individuals with Disabilities Education Act was passed to further mandate services for education of individuals with disabilities. The advanced technology of medicine has led to the survival of children who in the past would have succumbed to their illness. Early dismissal from hospitals has become routine, allowing students to return home and to school while receiving treatment. Special procedures (suctioning tracheostomies, catheterization, etc.) are now being requested in the schools, an educational setting, not a medical setting.

Quality Health Care

Quality health care is in the best interest and safety of the student and supports an optimal educational experience. This health care is best provided in the school through assessment, planning, and monitoring by the family physician and the school nurse. As most school districts do not have a full-time registered school nurse in every building, there may be concerns for the student's well-being and for district liability. However, most school districts have access to a registered school or public health nurse, and all districts have access to family physicians, to participate in the planning and care of the student.

School Nurse

The school nurse's delegation of care and supervision of non-licensed personnel assisting with student health care is a major concern. The type of delegation and supervision of medical and health related procedures that can be provided in schools is individually controlled in each state by the State Board of Nursing and the State Medical Practice Act. Licensed physicians must furnish directions that specify exactly which health services are to be provided under the circumstances of each case. Some states' nurse practice acts include a delegatory clause. This allows nurses to delegate tasks for which a license is required to an unlicensed person providing specific criteria are met.

Health Care Plan

It is essential to have a health care plan for students with special health care needs. This is for the protection of the student, as well as for the school personnel. It provides an effective and efficient strategy for the management of health care needs. The development of the health care plan should include the school administrator and/or designee, the parent, the student (if appropriate), the school nurse, and the student's physician.

Legal Responsibilities

- Federal Legislation
 - ↳ Rehabilitation Act of 1973 (PL 93—112)
 - ⇒ Provides a comprehensive plan for rehabilitation services to all individuals, regardless of the severity of their disability.
 - ⇒ Section 504 of this act is a civil rights law enacted to protect individuals with disabilities that limit major life activities from discrimination, and does not require the student to be in special education to receive services. Many students with disabilities do not qualify for services in special education. They are served in regular education.
 - ↳ Education for All Handicapped Children Act (EHA) of 1975 (PL 94-142)
 - ⇒ Mandates a free, appropriate public education for all children with disabilities in the least restrictive environment. In addition, there are specific requirements to be met:
 - An individual education plan (IEP).
 - Nondiscriminatory testing and placement.
 - Parental involvement.
 - Due process.
 - Confidentiality.
 - Staff development.
 - ↳ Education of the Handicapped Act Amendment of 1986 (PL 99-457)
 - ⇒ Mandates services for preschoolers with disabilities, ages three to five.
 - ⇒ Established Part H programs to assist states in the development of mandated, state-wide, interdisciplinary early identification and intervention services for infants and toddlers, birth to two years and eleven months of age.
 - ↳ Individuals with Disabilities Education Act (IDEA) of 1990 (PL 101-476)
 - ⇒ An amendment to the 1975 PL 94-142 and 1986 PL 99-457.
 - ⇒ Among other things, it redefines the criteria for eligibility for services and mandates transitional planning for students 16 years of age and older.

Legal Responsibilities (continued)

- ↳ Americans with Disabilities Act (ADA) PL 101-336 of 1992
 - ⇒ Protects the rights of all people of all ages with disabilities, including students in school settings who do not qualify for services in special education.
 - ⇒ Title 3 of this act covers requirements for public accommodations and commercial facilities to be accessible to persons with disabilities.
- Colorado State Legislation
 - ↳ Exceptional Children's Educational Act (ECEA) 22-20-101 of 1973 and the Rules and Regulations passed by the Colorado State Board of Education in 1992
 - ⇒ Regulates the services for children with disabilities between ages 3 and 21 who are unable to receive reasonable benefit from regular education without additional supports in the public schools because of specific disabling conditions. Children with disabilities may also include those from birth through two years of age who have a significant developmental delay and who potentially may be unable to receive reasonable educational benefits from regular education when they enter school.
 - ↳ Nurse Practice Act of Colorado, 12-38-101
 - ⇒ Regulates the practice of nursing through the Department of Regulatory Agencies with the power to enforce the provisions of the act.
 - ⇒ Senate Bill 92-96 added the Delegation of Nursing Tasks to the Nurse Practice Act in June 1992, allowing only a registered nurse to delegate nursing tasks to an unlicensed person if certain criteria are met.
 - ↳ These two Colorado laws, ECEA and the Nurse Practice Act, regulate health services to school children and youth with disabilities. The ECEA does reflect the requirement of the federal laws.

Influencing Factors

- Students who were formerly institutionalized for care and education are now in the public school setting.
- Laws, both state and federal, have mandated that students with disabilities be accommodated in the public school setting.
- Advanced medical technology has led to the survival of children who otherwise would have died from their illness.
- Routine early dismissal from hospitals results in many health-related procedures being done in the home and school setting.
- Implementation of health-related procedures in the home setting.
- Children with complex illnesses and health-related needs are returning to the school setting and require health procedures as part of their daily activities.
- School administrators and teachers are seeking health-related advice from the healthcare community. New avenues of communication and collaboration are being developed.
- School nurses (or public health nurses, in some areas) are becoming the bridge between schools and healthcare agencies.
- School nurses (with educators, healthcare persons, M.D.s, social workers, etc.) are required to develop a comprehensive plan of care for the medically fragile child and, when appropriate, train and delegate health-related procedures to be performed by a paraeducator or other school personnel.
- The management of the student who is medically fragile in the public school setting has become multiprofessional/interdisciplinary in nature, as well as dynamic and complex.

Essential School Components

<i>Wrist To Elbow</i>	<i>Foot To Foot</i>
<i>Elbow To Shoulder</i>	<i>Wrist To Back</i>

Adequate Funding

- The cost of financing special education, already astronomical, is soaring.
- The additional funds needed to hire specialized personnel, school nurses, technical equipment, additional transportation costs, and, in some instances, the remodeling of facilities to accommodate the needs of students is unwieldy and further stress an already financially strapped school system.
- Private insurance companies and government agencies that previously provided health care services have begun to minimize their services and shift the responsibility for these medically fragile children to the public schools.

Availability of Appropriate Facilities

- Students with profound levels of disability with chronic health problems are entering the public schools in increasing numbers.
- Facilities and conditions under which many medically related procedures must be performed are woefully inadequate.
 - ↳ For example, intrusive procedures that require objects to be inserted into the body are often performed without training and in facilities lacking privacy, hot water, or other proper sanitary conditions.

New Roles and Responsibilities for School Personnel

- As school personnel are required to perform more procedures, concerns arise regarding job descriptions and requirements, school conditions and available facilities, staff training and competencies, and liability, as well as the overall concern for providing a safe and healthy environment for all students.
- In many schools, health care services means that teachers, paraeducators, and other school personnel often must perform medical procedures in addition to their typical educational responsibilities.
- Medical procedures are often performed with minimal training and supervision, without proper facilities for cleanliness and sanitation, and under conditions that raise serious concerns about quality of the care.
- Ironically, school nurses are often among the first let go when layoffs occur. Many of these nurses have overseen several facilities. Schools should be employing more, not fewer, school nurses to address the health care needs of students with chronic health impairments.

Lack of Appropriate Training

- Due to the decreasing numbers of nurses assigned to public schools, there is inadequate training, supervision, and evaluation of non-medical personnel who are required to perform these procedures.
- Performing medically related procedures in less than optimal conditions places teachers, paraeducators, and other school-related personnel in a position where they could possibly jeopardize the health and safety of students.

Legal Liability Issues

- Besides the obvious concern for providing a safe and healthy environment for all students, there are other concerns that pertain to school nurses, public health nurses working in the schools, and other school employees.
- All medical procedures ultimately are the legal responsibility of the health professional and/or school nurse assigned to a facility.
- State laws, often referred to as nurse practice acts, require that medical procedures be performed only by a person educated and licensed to practice as a registered nurse, unless he or she has trained another person and is confident in that person's ability. However, not all procedures can be delegated and each state's board of nursing makes these determinations.
- Teachers and paraeducators are often designated to perform medical procedures by the school principal or their supervisor. In some states, this may be a clear violation of the state's nurse practice acts.

Developing a Health Care Plan

- Identification of a Student with Potential Health Needs
 - ↳ Parent and/or Student
 - ↳ School Personnel
 - ↳ School Nurse
 - ↳ Student's Physician
 - ↳ Hospital Staff
- Referral to the School Nurse
- Health Care Assessment
 - ↳ Identify Physical Functioning and Health Needs
- Team Meeting to Develop the Student's Health Care Plan
 - ↳ Parent
 - ↳ Student (if appropriate)
 - ↳ School Administrator
 - ↳ Classroom Teacher (if appropriate)
 - ↳ School Nurse
 - ↳ Physician or Physician's Consultant
- Team Meeting to Make Decisions
 - ↳ Regular Education and 504 Placement, or
 - ⇒ Health Care Plan
 - ⇒ Procedure for Health Care Service
 - ↳ Referral to Special Education
 - ⇒ Goals and Objectives Support Services
 - ⇒ Health Care Plan
 - ⇒ Procedure for Health Care Service

Health Care Plan Guidelines: *Parent*

The health care plan is developed jointly by the parent, student (if appropriate), school nurse, school building administrator, and teacher (if appropriate), in cooperation with the student's physician. If the student is in special education, the health care plan is to be part of the student's Individualized Education Plan (IEP). This encourages full cooperation to provide the best possible care for the student.

The health care plan is treated as confidential information and is stored in an area which is easily accessible to all personnel identified in the plan.

For a student whose special health care needs require special equipment and extensive health care services, it is strongly recommended a health care plan be developed and school personnel be trained to care for the student prior to the student's first day at school.

Parent

- Knows the student best.
- Provides medication, supplies, equipment, and physician's written instructions to the school.
- Is encouraged to participate in the training of school personnel administering the medication or treatment as needed.
- Participates in developing and implementing the health care plan.
- May be hesitant to give up care of the student to school personnel if the personnel are not adequately prepared to give the health care.

Health Care Plan Guidelines: *School Nurse*

The health care plan is developed jointly by the parent, student (if appropriate), school nurse, school building administrator, and teacher (if appropriate), in cooperation with the student's physician. If the student is in special education, the health care plan is to be part of the student's Individualized Education Plan (IEP). This encourages full cooperation to provide the best possible care for the student.

The health care plan is treated as confidential information and is stored in an area which is easily accessible to all personnel identified in the plan.

For a student whose special health care needs require special equipment and extensive health care services, it is strongly recommended a health care plan be developed and school personnel be trained to care for the student prior to the student's first day at school.

School Nurse

- Must be licensed to practice in some states.
- At the beginning of each school year, reviews the emergency or health information of all students and develops a list of students who need to have a new or updated health care plan.
- Obtains significant health data:
 - ↳ Onset-age of student.
 - ↳ Description of the significant health condition.
 - ↳ Treatment and medications taken at home and at school.
 - ↳ Subsequent episodes, treatment, and other significant history, including allergies.
 - ↳ Date last seen by physician (and dentist, if appropriate) for above noted concerns.
 - ↳ Names and phone numbers of current physician(s) who see the student, both the local physician and specialists (if appropriate).
 - ↳ Release of confidential information form to physician, hospital, and clinics.
 - ↳ Permission to administer medication form signed, if needed.
 - ↳ Name of preferred hospital where student is to be transported in case of emergency.

Health Care Plan Guidelines: *School Nurse* (continued)

- ↳ Current height and weight, needed by emergency transportation teams.
 - ↳ List of alternate persons and telephone numbers for when parents can't be located.
 - ↳ Other pertinent data relevant to the student's condition.
- Develops and implements with team members the health care plan to be carried out in the school. This should include directions for health care while the student is on the bus, on field trips, or participating in other extra curricular activities.
 - ↳ Health care plans must include the following components:
 - ⇒ Student identification data and date of plan.
 - ⇒ Source of medical care, both the local physician and specialist.
 - ⇒ Health problems list, including all medications and dosages for at home and at school.
 - ⇒ Description of illness/condition and possible effects on this student. If multiple health conditions exist, list each in the health care plan.
 - ⇒ Specific precautions that may need to be taken.
 - ⇒ Health Care Treatment Plan
 - Schedule.
 - Names of trained personnel (at least three).
 - Physician's written authorization.
 - ⇒ Emergency Information
 - Person(s) to contact.
 - Back-up plan.
 - ⇒ Transportation plan for special care needed during transit or precautions to be taken.
 - ⇒ Re-evaluation date, which depends on the stability of the medical condition.
- Ensures the plan is typed and signed by the parent, school nurse, and school administrator. Sends a copy to the physician for his approval or additions.
- Forms a partnership with the student's family to assure the health care is appropriate and parents are confident in the school personnel's ability to care for the student.
- Advises school personnel of health care plan.
 - ↳ Records a list of names of people trained in school to perform the

Health Care Plan Guidelines: *School Nurse* *(continued)*

- health procedures and dates of instruction. Has written documentation of delegation of care. Includes transportation personnel if appropriate.
- ↳ Inserts health care plan into file system. Makes notation on emergency card that a plan is on file and where it can be found.
- ↳ Updates the health problems list to include this student.

Health Care Plan Guidelines: *Physician*

The health care plan is developed jointly by the parent, student (if appropriate), school nurse, school building administrator, and teacher (if appropriate), in cooperation with the student's physician. If the student is in special education, the health care plan is to be part of the student's Individualized Education Plan (IEP). This encourages full cooperation to provide the best possible care for the student.

The health care plan is treated as confidential information and is stored in an area which is easily accessible to all personnel identified in the plan.

For a student whose special health care needs require special equipment and extensive health care services, it is strongly recommended a health care plan be developed and school personnel be trained to care for the student prior to the student's first day at school.

Physician

- Must be licensed in that state to practice in some states.
- Serves as a team member, providing input for the health care plan in the school setting.
- Identifies health information and services which need to be provided in the school setting.
- Determines if special training is needed to provide the prescribed health care.
- Writes prescriptions for parents to obtain medication and/or equipment:
 - ↳ Medication
 - ⇒ Dosage.
 - ⇒ Route.
 - ⇒ Time to be given.
 - ⇒ Side effects.
 - ⇒ Other specific instructions.
 - ↳ Equipment
 - ⇒ Purpose.
 - ⇒ Direction for use of application.
 - ⇒ Precautions.
 - ⇒ Other specific instructions.

Health Care Plan Guidelines: *Administrator*

The health care plan is developed jointly by the parent, student (if appropriate), school nurse, school building administrator, and teacher (if appropriate), in cooperation with the student's physician. If the student is in special education, the health care plan is to be part of the student's Individualized Education Plan (IEP). This encourages full cooperation to provide the best possible care for the student.

The health care plan is treated as confidential information and is stored in an area which is easily accessible to all personnel identified in the plan.

For a student whose special health care needs require special equipment and extensive health care services, it is strongly recommended a health care plan be developed and school personnel be trained to care for the student prior to the student's first day at school.

Administrator

- Determines if the classroom teacher should be included as a team member.
- Informs transportation director of the student and the potential need for health care.
 - ↳ Provides a copy of the health care plan to the transportation director.
 - ↳ Many school districts have developed guidelines for bus transportation of students with special needs.
- Manages potential environmental concerns, such as:
 - ↳ Informing all personnel, including lunchroom and playground assistants, of potential environmental situations, such as allergic reactions.
 - ↳ Special equipment needs, such as wheelchair ramps or assistance for access.
 - ↳ Extermination of insects as indicated.
 - ↳ Emergency power supply needs.
 - ↳ Appropriate electrical outlets for health care equipment, etc.
 - ↳ Storage of emergency equipment, such as oxygen.
- Knows the potential need of rescue teams and inquires into their capabilities.
 - ↳ Contacts local emergency unit to inquire about:

Health Care Plan Guidelines: *Administrator* (continued)

- ⇒ Their training.
- ⇒ If there is always a person who is trained to give medications.
- ⇒ What medications are carried on the unit.
- ⇒ If a rescue unit always comes.
- ⇒ If they send the police first.
- ⇒ How long it takes a rescue unit to get to the school.
- ⇒ The cost of transportation and who is financially responsible.
- ⇒ The location of the exit door to be used in emergencies, such as a fire.
- ⇒ What to do if there is a student using a wheelchair on the second floor and there is not electricity for the elevator or when the elevator is not to be used, such as in a fire.
- ⇒ Availability of a flight rescue unit.
 - Appropriate landing space.
 - Flight time from hospital.
 - Cost of transportation and who is responsible.
- Communicates with parents:
 - ↳ The developed health care plan and potential concerns.
 - ↳ What the expected emergency transportation costs will be and who will be responsible for payment.
- Ensures the student's emergency card is fully completed.
- Provides time and financial support for training of the school nurse and other staff members, as needed.
- Keeps the student's education program schedule easily accessible, as to know the location of the student in the case of an emergency.

Daryl, My Brother

18 years old,
TMH (trainable mentally handicapped),
Goes to a special education class in an elementary school,
12 years of 'Individualized Instruction' based on IEP goals,
He has learned to do a lot of things!

He can put 100 pegs in a board in less than 10 minutes while in his seat with 95% accuracy.
But, he can't put quarters in a Coke machine.

He can touch his nose, shoulder, foot, leg, hair, and ear on command.
But, he can't blow his nose when needed.

He can complete a 12-piece Big Bird puzzle with 100% accuracy.
But, he can't put clean silverware in the right compartment in the drawer.

He can color a Valentine and stay in the lines.
But, he can't sign his name to it.

He can fold paper in halves and quarters.
But, he can't fold towels that come out of the dryer.

He can sort blocks by color, up to 10 different colors.
But, he can't sort clothes, whites from colors for washing.

He can roll Play Dough and make wonderful clay snakes.
But, he can't roll bread dough and cut out biscuits.

He can string beads in alternating colors and match it to a pattern on a DLM card.
But, he can't tie his shoes.

He can sing his ABCs and tell me the names of all the letters when presented on a card in uppercase with 80% accuracy.
But, he can't tell the men's room from the ladies' room at the shopping mall.

Daryl, My Brother (continued)

He can cut a black felt cloud and put it on an enlarged calendar with assistance, when told it's cloudy outside.

But, he doesn't know how to decide whether to wear a raincoat or not.

He can identify 100 different Peabody Picture Cards by pointing.

But, he can't order a hamburger by pointing to a picture.

He can walk forward and backward on a balance beam.

But, he can't walk up steps or bleachers to go to a basketball game.

He can count to 100 by rote memory.

But, he doesn't know how many dollars to give the cashier for a \$2.59 McDonald's meal.

He can put a cube in a box, under a box, beside a box, and behind a box.

But, he doesn't know how to put his trash in the bin at Burger King.

He can clap along with his favorite songs.

But, he doesn't know how to turn on the radio or a CD player.

He can sit in a circle with appropriate behavior and play "Duck, Duck, Goose."

But, nobody else his age wants to do that.

Question: What is the difference between what Daryl has been taught to do (and therefore, has learned) and what he can't do?

Adapted from A Case for Teaching Functional Skills by Preston Lewis, TASH Newsletter, December 1987.



Module A Transparencies

Module A: Receiving Health-Related Services and Procedures in the School Setting

SgHlthA-T1



- ***Identify laws that guide health-related services in schools.***
- ***Identify services in schools designed to meet the needs of students who have significant health support needs.***
- ***Describe topics regarding funding, new roles, training, and liability.***
- ***Recognize the process of developing a health care plan.***
- ***Identify how to facilitate increased levels of participation.***

Health-Related Services and the Public Schools

SgHlthA-T2



- *Students who were formerly institutionalized for health care and education are now receiving their health care and education during class hours in the public school setting.*
- *Health care is best provided in the school through assessment, planning, and monitoring by the family physician and the school nurse.*
- *Nurses may delegate tasks for which a license is required, to unlicensed persons, providing specific criteria are met.*
- *It is essential to have a health care plan for students with special health care needs.*

Legal Responsibilities

SgHlthA-T3



Federal Legislation

- *Rehabilitation Act of 1973 (PL 93—112)*
- *Education for All Handicapped Children Act (EHA) of 1975 (PL 94-142)*
- *Education of the Handicapped Act Amendment of 1986 (PL 99-457)*
- *Individuals with Disabilities Education Act (IDEA) of 1990 (PL 101-476)*
- *American Disabilities Act (ADA) PL 101-336 of 1992*

Colorado State Legislation

- *Exceptional Children's Educational Act (ECEA) 22-20-101 of 1973 and the Rules and Regulations passed by the Colorado State Board of Education in 1992*
- *Nurse Practice Act of Colorado, 12-38-101*

Technologically Dependent

SgHlthA-T4



Refers to those students who require devices or mechanical equipment to perform normal activities of daily living.

- *Respirators for breathing.*
- *Urinary catheters for urination.*
- *Feeding tubes for nourishment.*
- *Wheelchairs and walkers for movement and ambulation.*
- *Medications for the prevention of infections or maintenance of health.*

Essential School Services

SgHlthA-T5



- *Mechanisms*
- *Facilities*
- *Equipment*
- *Services*

Key Elements and Controversial Issues

SgHlthA-T6



- *Adequate Funding*
- *Availability of Appropriate Facilities*
- *New Roles and Responsibilities for School Personnel*
- *Lack of Appropriate Training*
- *Legal Liability Issues*

Developing a Health Care Plan

SgHlthA-T7



- *Identification of a Student with Potential Health Needs*
- *Referral to the School Nurse*
- *Health Care Assessment*
- *Team Meeting to Develop the Student's Health Care Plan*
- *Team Meeting to Make Decisions*
 - *Regular Education and 504 Placement, or*
 - *Referral to Special Education*

Key Points in the Health Care Plan Process

SgHlthA-T8



- *Identifying Data*
- *Source of Medical Care*
- *Health Problems List*
- *Description of Illness and/or Condition*
- *Specific Precautions*
- *Health Care Treatment Plan*
- *Emergency Information*
- *Transportation Plan for Health Needs*
- *Re-Evaluation Date*

A Functional Approach to Curriculum and Instruction

SgHlthA-T9



Skills are selected according to a specific target or ultimate goal needed by the student as he or she matures into adulthood.

Partial Participation

SgHlthA-T10



Individuals with severe disabilities, regardless of their limited independence or level of functioning, should be permitted to participate at least partially in chronologically age-appropriate environments and activities.

Steps of Partial Participation

SgHlthA-T11



- *Modify the Environment*
- *Modify the Skill Sequence of the Task*
- *Adapt Materials*
- *Provide Personal Assistance*

Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services

Significant Health Support Needs Academy

Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services



A. Module Goals

Using the **Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services** handout and transparency (H1/T1), review the goals of the module.

1. Identify the role of the school nurse in health-related services.
2. Identify the role of the paraeducator in health-related services.



Note to Instructor: In some states there is a distinction between a school nurse and a registered school nurse. This academy uses the term “school nurse” and makes no such distinction. If this academy is being taught in a state with such a distinction, the instructor will need to adjust the content accordingly, defining the respective job responsibilities accordingly.



Goal 1: Identify the role of the school nurse in health-related services.



1.1 Lecture: The Role of the School Nurse

There is no one member of a school's staff more important to the safety and success of students with significant medical, health-related needs in the public schools than the school nurse. As reviewed in ***Module A: Receiving Health-Related Services and Procedures in the School Setting***, the school nurse plays a critical role on the school team regarding the development of health care plans, communicating with pertinent district and non-district personnel, acting as a go-between for the school and parents, and monitoring the general safety and well-being of students on an ongoing basis.

The school nurse also plays an important individual role within the school. There are many tasks and responsibilities that can only be addressed by the school nurse.



1.2 Activity: The School Nurse, Delegation, and Accountability

Paraeducators will participate in an activity that provides an opportunity to gain a better understanding of the role of the school nurse.



1.2.1 Steps

- Have the participants break into six groups by counting off by six: all 1's together, all 2's together, all 3's together, etc.
- Distribute the appropriate handouts as follows:
 - ↳ Group 1: **Delegatory Clause of the Nurse Practice Act (H2)**
 - ↳ Group 2: **Criteria for Delegation (H3)**
 - ↳ Group 3: **Responsibilities as a Delegator (H4)**
 - ↳ Group 4: **Standards for the Accountability of the School Nurse (H5)**
 - ↳ Group 5: **Exclusions from the Rules and Regulations (H6)**
 - ↳ Group 6: **Important Points to Remember (H7)**
- Instruct the groups to read and discuss their assigned handout.
- When finished, have the participants form new groups, ensuring each contains at least one member from each of the original groups.
- Have the participants share the information and discussion regarding the topic from their original group with their new group members.



1.2.2 Lecture: Key Points Regarding the Role of the School Nurse

The school nurse must be sure that a delegated task is performed with the same degree of care and skill that would be expected of a school nurse. The task is the same but the knowledge differs between the nurse and the paraeducator or other school personnel.

Present and review the **Remember...** transparency (T2).

- Only a school nurse can delegate.
- A delegated task can be withdrawn at any time by the school nurse.
- Documentation regarding the delegation is essential (who, what, where, when, and how).
- The school nurse must train the school personnel to do the delegated task and document the training.
- Medications given at school are included in the Delegatory Clause of the Nurse Practice Act.



1.3 Lecture: Technical Skills Chart

Most school personnel do not have the opportunity to observe the school nurse carrying out the various functions of his or her job throughout the school day. Many personnel are not even aware of the degree of responsibility or technical skill required of a school nurse in keeping students medically safe while in the school environment.

Present and review the **Technical Skills Chart** handout (H8), pointing out which of the procedures can be delegated and to whom they can be delegated.

- Assist with Dressing (clothing)
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ School Nurse (SN)
 - ⇒ Physical Therapist (PT)
 - ⇒ Occupational Therapist (OT)
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ None.
 - ↳ Remarks
 - ⇒ Student and parent or guardian can inform school personnel of procedures being used in the home.

- Vital Signs
 - ↳ Temperature, Pulse, Respirations (TPR)
 - ↳ Blood Pressure (BP)
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ To Be Determined by SN
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of fluctuating or abnormal TPR.
 - ⇒ Evidence of fluctuating or abnormal BP when BP is to be taken before or after medication or treatment.
 - ↳ Remarks
 - ⇒ Availability of appropriate equipment.
- Height and Weight
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ OT
 - ⇒ PT
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ⇒ Secretary
 - ⇒ Specialized Aide
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of frequent fluctuations or dramatic changes in weight, arrested growth.
 - ↳ Remarks
 - ⇒ Availability of appropriate equipment.
 - ⇒ Record on growth chart.
 - ⇒ Medications might affect fluctuation.
- Fluids/Nourishment
 - ↳ Prepare nourishment as specified in health care plan.
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - OT
 - PT
 - Teacher
 - Food Service Personnel
 - Health Clerk
 - Secretary
 - Specialized Aide

- ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.
- ⇒ Remarks
 - Student and parent or guardian can inform school personnel of procedures being used at home.
 - Parent or guardian shall provide specialized nourishment.
- ↪ Feed Students
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - OT
 - PT
 - Teacher
 - Health Clerk
 - Secretary
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of change in student's oral motor swallowing, positioning, and/or sensory abilities.
 - ⇒ Remarks
 - Student and parent or guardian can inform school personnel of procedures being used at home.
- ↪ Hyperalimentation/Lipids
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Never delegated.
 - ⇒ Remarks
 - Requires prescription from physician.
- ↪ Gastrostomy Feedings (tube already in place)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)

- Evidence of obstruction, malabsorption, or problem at insertion site.
- ⇒ Remarks
 - Requires prescription from physician.
 - SN will follow health care plan for reinsertion of tube.
- ↳ Nasogastric Tube Feedings (tube already in place)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of displacement of tube.
 - Obstruction of tube.
 - Excessive vomiting or diarrhea.
 - ⇒ Remarks
 - Requires prescription from physician.
 - SN will follow health care plan for reinsertion of tube.
- Medications
 - ↳ Assist Student in Taking Own Medications
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Medications requiring blood pressure, radial, or apical pulse before or after giving.
 - Medications that require nursing judgment to determine dose.
 - ⇒ Remarks
 - All medications given in school should follow the requirements set forth in the Standards and Regulations for Schools adopted by the Colorado Board of Health.
 - ↳ Give Oral Medications
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually

- not delegated under given circumstances)
 - Medications requiring blood pressure, radial, or apical pulse before or after giving.
 - Medications that require nursing judgment to determine dose.
- ⇒ Remarks
 - All medications given in school should follow the requirements set forth in the Standards and Regulations for Schools adopted by the Colorado Board of Health.
- ↳ Give Medications via Gastrostomy or Nasogastric Tube
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Medications requiring blood pressure, radial, or apical pulse before or after giving.
 - Medications that require nursing judgment to determine dose.
 - Evidence of displacement of tube.
 - Obstruction of tube.
 - Excessive vomiting or diarrhea.
 - ⇒ Remarks
 - Requires prescription from physician.
 - The Colorado Board of Nursing recommends this not be delegated.
- ↳ Give Intravenous Medications (with IV tube in place)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Not to be delegated.
 - ⇒ Remarks
 - Requires prescription from physician.
 - Given only by SN.
 - If tube is obstructed, follow health care plan.
- ↳ Give Intramuscular Medications
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN

- PARAprofessional Resource and Research Center, 1380 Lawrence Street, Suite 650, Denver, CO 80204
Phone: 303-556-6464 Fax: 303-556-6142 Website: <http://paracenter.cudenver.edu>

- 78

- Requires prescription from physician.
 - Urinary Tract Care
 - ↳ External Catheter
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - Teacher
 - Health Clerk
 - Secretary
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.
 - ⇒ Remarks
 - None.
 - ↳ Intermittent Clean Catheterization
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection.
 - Pain.
 - Bright red bleeding.
 - Inability to insert catheter.
 - ⇒ Remarks
 - Requires prescription from physician.
 - Parent or guardian provides equipment and supplies for catheterization.
 - ↳ Crede Method
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.
 - ⇒ Remarks
 - Requires prescription from physician.
 - Student and parent or guardian inform school personnel of procedures being used at home.
 - ↳ Indwelling Catheter (care of external equipment only)

- ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
- ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection.
 - Displacement or obstruction of tube.
- ⇒ Remarks
 - Parent or guardian provides equipment and supplies for catheterization.
- ↳ Peritoneal Dialysis
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Never delegated when Heparin to dialysate.
 - ⇒ Remarks
 - Requires prescription from physician.
 - This is an aseptic exchange procedure.
 - Parent or guardian provides equipment and supplies.
- Bowel and Bladder
 - ↳ Bedpan and Urinal
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - Teacher
 - Health Clerk
 - Secretary
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks
 - Availability of appropriate equipment.
 - ↳ Care of Incontinent Student
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - Teacher
 - Health Clerk
 - Secretary

- Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks
 - Parent or guardian to provide supplies of clean clothing.
 - Wear gloves.

→ Stoma Care

 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks
 - Parent or guardian to provide supplies of clean clothing.
 - Wear gloves.

→ Diapering

 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks
 - Parent or guardian to provide supplies of clean clothing.
 - Wear gloves.

→ Prescribed Bowel and Bladder Training

 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks

- Parent or guardian to provide medications as prescribe by physician.

\Rightarrow To Be Determined by SN

- ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ None.
- ↳ Remarks
 - ⇒ Requires prescription from physician.
 - ⇒ Availability of supplies and equipment.
 - ⇒ Special precautions for students who have diabetes, heart disease, or unstable basal body temperatures.
- Personal Hygiene
 - ↳ Oral Hygiene
 - ↳ Nail Care
 - ↳ Hair Care
 - ↳ Skin Care
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ PT
 - ⇒ OT
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ⇒ Social Worker
 - ⇒ Counselor
 - ⇒ Secretary
 - ⇒ Specialized Aide
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of rash, skin breakdown, or infection.
 - ↳ Remarks
 - ⇒ May require a physician's authorization to provide this care.
- Decubitus (pressure sores)
 - ↳ Prevention
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - OT
 - PT
 - Health Clerk
 - Teacher
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)

- 84

- ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of pain or more restrictive movement.
- ↳ Remarks
 - ⇒ Require prescription from physician.
- Ambulation
 - ↳ Assist with Crutches, Walkers, Canes, Wheelchairs, Scooter Boards
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ PT
 - ⇒ SN
 - ⇒ OT
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ⇒ Secretary
 - ⇒ Specialized Aide
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ None.
 - ↳ Remarks
 - ⇒ Availability of appropriate equipment in school buildings.
 - ⇒ A prescription may be required from physician.
- Cast and/or Braces
 - ↳ Observation
 - ↳ Alignment
 - ↳ Functioning
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ OT
 - ⇒ PT
 - ⇒ Adaptive P.E. Teacher
 - ⇒ To Be Determined by SN
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of impaired circulation, infection, pain, drainage, or bleeding.
 - ↳ Remarks
 - ⇒ May require a prescription from physician.
- Intake/Output

- ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ OT
 - ⇒ PT
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ⇒ Secretary
 - ⇒ Specialized Aide
- ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Changes in usual pattern.
- ↳ Remarks
 - ⇒ Availability of appropriate equipment.
- Specimen Collection
 - ↳ Urine
 - ↳ Stool
 - ↳ Sputum
 - ↳ Blood (finger stick)
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ To Be Determined by SN
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of infectious disease.
 - ⇒ Obtaining blood sample.
 - ↳ Remarks
 - ⇒ Requires prescription from physician.
 - ⇒ Health care provider or parent or guardian provides an appropriate collection container and supplies.
 - ⇒ Wear gloves.
- Specimen Testing
 - ↳ Urinalysis (UA)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Questionable results.
 - ⇒ Remarks
 - If student is taught to self-test, monitoring is to

- be done by designated school personnel.
 - Availability of appropriate supplies.
 - ↳ Hematocrit (HCT)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Not to be delegated.
 - ⇒ Remarks
 - Availability of appropriate equipment and supplies.
 - ↳ Blood Glucose (glucometer)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Questionable results.
 - ⇒ Remarks
 - If student is taught to self-test, monitoring is to be done by designated school personnel.
 - Availability of appropriate supplies.
- Care of Equipment
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ All School Personnel Using Equipment
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of malfunctioning.
 - ↳ Remarks
 - ⇒ Follow manufacturer's recommendations, current nursing procedures, and home care provider instructions.
- Charting
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ All School Personnel Providing Care
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Data on the student and cumulative health records to be done by SN or designee.
 - ↳ Remarks

- ⇒ Recording forms may be set up by SN for school personnel to check-off when care is given.
- ⇒ SN always keeps notes of care given.

Emphasize that all of these procedures include training needs as specified by the school nurse.



Note to Instructor: The use of gloves for various procedures will be covered in greater detail in **Goal 2: Identify the role of the paraeducator in health-related services.**



1.4 Lecture: Commonly Delegated Procedures

Refer to the **Technical Skills Chart** handout (H8). Ask the paraeducators to skim the *School Personnel Who Can Appropriately Provide Care* sections of the handout and identify which procedures they would be qualified to assist with given the appropriate training and following the delegative procedures. Those procedures that indicate paraeducators as possible delegates are any that list *Specialized Aide* or *To Be Determined by SN*. The list is large and it is important to stress that paraeducators in schools at any time could be called upon to receive training to perform these procedures.



Goal 2: Identify the role of the paraeducator in health-related services.



2.1 Lecture: The Role of the Paraeducator

The role of the paraeducator is greatly enhanced by an increased knowledge and understanding of the human body and potential physical conditions that are in the public school setting. While the paraeducator is not expected to diagnose health needs, they are often the first line of defense in noting and seeking support or assistance for students.

The primary and specific role of most paraeducators is to deliver direct services to students. As such, it is not unusual for the paraeducator to be the first to notice anything that seems unusual. It cannot be stressed enough that when carrying out duties that have been delegated by a school nurse, it is essential that the paraeducator be highly observant of and equally communicative with the school nurse who delegated the duty.

The role of the paraeducator when performing health-related procedures in the school setting is key in implementing comprehensive care to the student who is medically fragile or who has significant health related conditions and concerns.

When interacting with the school nurse, it is important to recognize the direct role that the nurse has with the paraeducator when delegating health-related procedures is involved. Present and review the **The School Nurse Must...** transparency (T3).

- The registered school nurse must:
 - Delegate the task.
 - Teach to master the task.
 - Document the teaching and mastery of the task.
 - Remember that he or she is legally responsible whether or not the task has been delegated.
 - Recognize that some procedures cannot be delegated.

The paraeducator must respond to the expectations of the school nurse and keep in mind these important points when performing health-related procedures in the school setting. Present and review the **The Paraeducator Must...** transparency (T4).

- The paraeducator must:
 - Practice the delegated task until completely comfortable with the task.

- ➔ Perform the task, as directed by the school nurse, with a specific student.
- ➔ Document each time the task is performed, as directed by the school nurse.

Emphasize that it is important to always keep in mind that a paraeducator can communicate discomfort with performing a specific procedure if they do not feel confident in their abilities to carry out the procedure as safely as possible.



2.2 Lecture: Personal Safety and Well-Being

It is critically important that paraeducators understand that an key part of their role in the public school is to follow health guidelines and protocols in maintaining their own health and well-being when assisting students.

Two of the most simple, yet most important protocols that have a critical and immediate impact on safety for the paraeducator, as well as the students being assisted, are following guidelines for universal precautions and handwashing. These result in greatly increasing the likelihood that germs and bacteria will not be transferred from one individual to another.

The paraeducator, school nurse, and classroom teacher typically come into higher levels of physical contact with communicable ailments than the other people in the public school setting. Students seldom follow sanitary guidelines during the course of their school day. Working in the world that students inhabit puts paraeducators in constant physical contact with contagions.



2.3 Lecture: Universal Precautions

Research shows that the risk of contracting a significant contagious disease (SCD) in a school setting is extremely small. However, school personnel need to decrease the possibility of exposure to bloodborne pathogens. Significant contagious diseases include cytomegalovirus (CMV), hepatitis B virus (HBV), and human immunodeficiency virus (HIV) infections.

Universal precautions means protecting oneself from exposure to blood or bodily fluids through the use of latex gloves, masks, or eye goggles; cleaning blood or bodily fluid spills with soap and bleach solution and water; and disinfecting and incinerating

or decontaminating infected water before disposing in a sanitary landfill.

The use of universal precautions reduces the risk of exposure to bloodborne pathogens that are a result of contact with blood and bodily fluids. Most school districts demand the use of universal precautions from their employees as a simple but highly reliable means of maintaining the health and safety of the employee.

Present the **Universal Precautions** handout and transparency (**H9/T5**). Universal precautions includes:

- Attending to others.
 - ↳ Use a barrier when exposure to blood or body fluids is possible.
 - ↳ Bag soiled clothing.
 - ↳ Bag waste and used gloves or barriers.
 - ↳ Wash hands thoroughly.
- Attending to the environment.
 - ↳ Use gloves to clean.
 - ↳ Use disinfectant soaps.
 - ↳ Use disposable cleaning materials.
 - ↳ Disinfect affected areas.
 - ↳ Secure waste in bag for disposal.
- Attending to self.
 - ↳ Remove gloves and place in a plastic bag.
 - ↳ Immediately wash with disinfectant soaps.



Note to Instructor: Many school districts have videos available that give a clear and brief explanation of the use of universal precautions. Obtain and use this video, if possible to enhance this lecture.

Emphasize the critical importance of using universal precautions across the school day for any activity or procedure that could possibly put the paraeducator at risk of coming into contact with bodily fluids. Review your district's procedure for providing paraeducators with the appropriate materials (such as latex or non-latex gloves) to provide for their safety.



2.4 Lecture: Handwashing

Handwashing can be defined as cleansing the hands by the action of soap, water, and friction. Handwashing reduces the number of disease-causing organisms on the hands helps to prevent the spread of infectious disease.

Handwashing should be done by everyone, including the student, before and after:

- Any physical contact with the student.
- Wearing disposable gloves.
- Handling procedural equipment.
- Eating.
- Handling bodily fluids.
- Going to the bathroom.

It is important to remember to review the physician's orders and the student's health care plan for any special precautions.

Distribute and review the **Handwashing** handout (**H10**). Proper handwashing requires several steps.

- Gather the necessary equipment at the sink.
 - ↳ A sink with hot and cold running water,
 - ⇒ If running water is not available, bring water in a large pitcher or similar container and have a basin nearby or pan to receive waste water.
 - ↳ Liquid soap in a dispenser,
 - ↳ Paper towels,
 - ↳ Lotion, and
 - ↳ A plastic lined waste container.
- Remove any jewelry.
 - ↳ Stones, settings, links, etc. can harbor microorganisms.
- Turn on the water.
 - ↳ Leave the water running until handwashing is complete.
 - ↳ Select a warm water temperature.
 - ⇒ Hot water removes protective oils and will dry out the skin. Cold water is better than none, as friction is the key.
- Wet hands.
- Pump liquid soap from dispenser on to one hand and begin lathering hands and wrists.
 - ↳ Bar soap and soap dishes can provide a media for bacteria growth.
- Wash all surfaces of hands and fingers, and at least two inches above wrists.
 - ↳ Keep fingertips pointed downward and hands lower than elbows to prevent water contaminated with microorganisms

- from running over clean arms.
- ↳ Get soap into knuckle folds, between fingers, and thoroughly clean under nails.
 - ⇒ Dirt and microorganisms accumulate in these areas. Use the folded edge of a paper towel to clean nails if nothing else is available.
- ↳ Use a rotating motion and friction while washing.
 - ⇒ Rub one hand against the other.
 - ⇒ Interlace fingers and thumbs, rubbing up and down.
 - ⇒ Rub fingertips against palms to clean around nail beds.
 - ⇒ Rub wrist and area two inches above with a twisting motion, repeat with second wrist.
- Add water as needed.
 - ↳ This may be necessary to maintain a good lather.
- Rinse hands and forearms.
- Use paper towel to wipe the surface around the sink.
 - ↳ Clean and dry surfaces deter the growth of microorganisms.
 - ↳ Discard the paper towel in the waste container.
 - ⇒ Avoid touching the container.
- Dry hands gently and thoroughly with a clean paper towel.
 - ↳ Dry from the hands to the forearms, from the clean to the dirty.
 - ↳ Skin that is properly dried is less likely to chap and split.
- Use paper towel to turn off water.
 - ↳ Discard used paper towels in waste container.
 - ↳ Avoid touching the container.
- Apply lotion as desired.
 - ↳ Keeps skin soft and more resistant to bacteria.
- Document handwashing of self and student on the student's health record or treatment log.
 - ↳ Normally, recording of routine handwashing is not necessary, however, in special circumstances, it may be.



2.5 Activity: Washing Your Hands

Paraeducators will participate in an activity that provides an opportunity to gain experience with the handwashing procedure.



2.5.1 Steps

- Direct the participants to an area that has a sink, soap, and paper or hand towels.
- Instruct the participants to wash their hands, using the steps provided in the **Handwashing** handout (H10).
- Ensure each participant has the opportunity to wash their hands.
- Observe the participants, answering questions and providing clarification as necessary.



2.5.2 Lecture: The Importance of Handwashing

Stress the critical importance of this one activity in the lives of the paraeducator.

- Handwashing can lead to decreased illness (their own, students they may encounter, and family members they may pass illnesses on to).
- Decreased personal illness leads to increased health and well-being.
- Handwashing decreases school district costs related to sick time.
- If a paraeducator works with a student who is susceptible to illness because of a fragile medical condition, it is the paraeducator's responsibility to be as careful as possible to not put the student with a compromised health situation at further risk.



2.6 Lecture: Glove Usage

Distribute and review the **Glove Usage** handout (H11).

- Gloves should be worn:
 - ↳ When direct care of a student may involve contact with blood or other bodily fluids.
 - ↳ During contact with urine, feces, and respiratory secretions for control of infection.
 - ↳ When changing a diaper or catheterizing a student.
 - ↳ When changing dressings or sanitary napkins.
 - ↳ When providing mouth, nose, or tracheal care.
 - ↳ If the caregiver has broken skin on his or her hands, including around the nails.
 - ↳ When cleaning up a blood spill (e.g., nosebleeds) or bodily

- fluids and wastes, and soiled supplies.
- When gloves fail:
 - ↳ Always wash the contaminated area immediately with soap and water.
 - ↳ If a mucus membrane splashes (eye or mouth) or contamination of broken skin occurs, irrigate or wash the area thoroughly.
 - ↳ If cut or punctured with a needle, wash the area thoroughly with soap and water.
 - ↳ In those instances where broken skin, mucus membrane, or needle stick exposures occur, the caregiver should document the incident. The student's parent or guardian should be notified. The person who had the exposure should contact his or her physician for further care as outlined by Center for Disease Control's recommendations.
- Gloves should be disposed of after each use and not reused.



2.7 Lecture: Bodily Fluids

Paraeducators often have job responsibilities that increase the likelihood of their coming into contact with bodily fluids. As such, it is imperative that paraeducators understand what is involved in handling (dealing with, acting on, or disposing of) bodily fluids. Present and review the **Bodily Fluids** handout (H12).

- Blood
 - ↳ Source
 - ⇒ Cuts
 - ⇒ Abrasions
 - ⇒ Nosebleeds
 - ⇒ Menses
 - ⇒ Blood Samples (by fingerprick)
 - ⇒ Contaminated Needle
 - ↳ Organisms of Concern
 - ⇒ Hepatitis B virus
 - ⇒ HIV virus
 - ⇒ Cytomegalo virus (CMV)
 - ↳ Transmission
 - ⇒ Bloodstream inoculation through cuts and abrasions on hands.
 - ⇒ Direct bloodstream inoculation.
- Feces

- ↳ Source
 - ⇒ Incontinence
 - ⇒ Stool Specimens
- ↳ Organisms of Concern
 - ⇒ Salmonella bacteria
 - ⇒ Shigella bacteria
 - ⇒ Rotavirus
 - ⇒ Hepatitis A virus
- ↳ Transmission
 - ⇒ Oral inoculation from contaminated hands.
- Urine
 - ↳ Source
 - ⇒ Incontinence
 - ⇒ Urine Specimens
 - ↳ Organisms of Concern
 - ⇒ Cytomegalo virus
 - ↳ Transmission
 - ⇒ Bloodstream, oral, and mucus membrane inoculation from hands.
- Respiratory Secretions
 - ↳ Source
 - ⇒ Saliva
 - ⇒ Nasal Discharge
 - ⇒ Sputum
 - ↳ Organisms of Concern
 - ⇒ Mononucleosis virus
 - ⇒ Common cold virus
 - ⇒ Influenza virus
 - ⇒ Hepatitis B virus
 - ↳ Transmission
 - ⇒ Oral inoculation from contaminated hands.
 - ⇒ Bloodstream inoculation through bites.
- Vomitus
 - ↳ Organisms of Concern
 - ⇒ Gastrointestinal viruses (e.g., Norwalk agent Roavirus)
 - ↳ Transmission
 - ⇒ Oral inoculation from contaminated hands.
- Semen
 - ↳ Organisms of Concern
 - ⇒ Hepatitis B virus

- ⇒ HIV virus
- ⇒ Gonorrhea
- ↳ Transmission
- ⇒ Sexual contact, intercourse.



2.8 Lecture: Handling Bodily Fluids

Proper handling of bodily fluids decreases the risk of direct transmission of disease and minimizes the risk of indirect transmission of disease resulting from contamination of the physical environment and equipment by bodily fluids. Distribute and review the **Guidelines for Handling Bodily Fluids** handout (H13). Necessary equipment for handling bodily fluids includes:

- Soap
- Running Water
- Paper Towels
- Disposable Gloves
- Disposable Plastic Bag
- Plastic-Lined and Covered Waste Container
- Dust Pan
- Bucket
- Mops
- Appropriate Disinfectants

Work with the school administration to:

- Make handwashing the foundation of the disease prevention program.
 - ↳ Handwashing is the single most effective procedure in preventing the spread of communicable diseases.
- Select and purchase appropriate disposable gloves.
 - ↳ Appropriate gloves must be able to hold air or water.
- Select appropriate disinfectants.
 - ↳ Appropriate disinfectants are those registered with the U.S. EPA as “hospital disinfectants” and are tuberculocidal when used in recommended dilutions.
 - ⇒ Ethyl or isopropyl alcohol (70%).
 - ⇒ Phenolic germicidal detergent in a 1% aqueous solution (e.g., Lysol).
 - ⇒ Sodium hypochlorite solution in a 1:10 ratio, prepared daily (e.g., a cup and a half of household bleach mixed with one gallon of water).

- 

Paraeducators will participate in an activity that provides an opportunity to gain a better understanding of universal precautions.



- Have the participants break into small groups.
- Distribute the **Paraeducators and Universal Precautions** handout (H14).
- Instruct the participants to read through the handout.

- Have the groups discuss where and when they have had opportunities in their roles as paraeducators to use universal precautions.
- Have the groups answer the question, “Do you carry the physical materials essential to keep yourself safe when working in your job with you?”
- When finished, ask the groups to share their discussions. Emphasize the importance of being prepared ahead of time to handle any situation that might put them at physical risk.
- When all groups have shared their discussions, have the participants write a short summary of what they will do after returning to their school to ensure their own safety and the safety of others related to universal precautions.
- When finished, ask the participants to share their plans.



2.10 Lecture: Providing Emergency Medical Assistance

There are many situations in the daily responsibilities of a paraeducator in which they may be put in the position of needing to make decisions regarding providing emergency medical assistance to students. This could happen while on recess duty, on a field trip, in the cafeteria, at a track meet, etc.

Knowing how to assess a situation and how to proceed is key. Present and review the **Action Guide for Providing Emergency Care** handout and transparency (**H15/T6**).



Note to Instructor: Each school district varies in their expectations for staff responses to emergency situations. Districts typically have protocols that are followed for a variety of situations ranging from fire or tornado drills to safety regarding unknown individuals on the campus. Contact the school district this academy is being taught in and acquire copies of their safety protocols, making handouts as necessary. Review the policies or protocols that vary from the information provided in this academy.



2.11 Lecture: Priorities in Emergency Situations

In an emergency situation, a paraeducator is expected to proceed in a reasonable and professional manner. Present and review the **Emergency Priorities** handout and transparency (**H16/T7**).

1. Remain calm.
2. Assess the situation.
 - ➡ Be sure the situation is safe for you to approach.

- ↳ Possible dangers include:
 - ⇒ Live electrical wires.
 - ⇒ Gas leaks.
 - ⇒ Building damage.
 - ⇒ Fire or smoke.
 - ⇒ Traffic.
 - ⇒ Violence.
- 3. Give immediate attention and call for emergency care and/or ambulance for the victim:
 - ↳ While:
 - ⇒ Not allowing a victim with injuries to head, neck, or back to move.
 - ⇒ Establishing an airway.
 - ⇒ Starting mouth-to-mouth resuscitation, if the person has stopped breathing.
 - ⇒ Performing the Heimlich Maneuver, if the airway is blocked.
 - ⇒ Starting CPR if the victim's breathing and heart have stopped.
 - ⇒ Controlling severe breathing.
 - ⇒ Treating for shock.
 - ⇒ Flushing irritant chemicals from eyes, skin, or mucous membranes with large amounts of water.
 - ↳ And/or, if the victim:
 - ⇒ Is unconscious.
 - ⇒ Is having seizures, but without a previous history of seizures.
 - ⇒ Is having significant difficulty breathing.
 - ▶ The inability to swallow or speak, and/or severe swelling and generalized hives could signal a severe allergic (anaphylactic) reaction
 - ⇒ Has been poisoned.
- 4. When immediate medical attention is indicated, call for emergency care. Otherwise, whenever possible, contact the parents first.
- 5. Under no circumstances should a sick or injured student be sent home without the knowledge and permission of the parent, guardian, or other responsible person.

It is critical that paraeducators be prepared to follow protocol and to assist with medical situations that may occur in the school setting. School safety is the

responsibility of all adults involved and includes personal safety as well as the safety of others.

Module B Handouts



Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services

1. Identify the role of the school nurse in health-related services.
2. Identify the role of the paraeducator in health-related services.

Delegatory Clause of the Nurse Practice Act

The Colorado Nurse Practice Act licenses and regulates the practice of nursing and mandates what the registered nurse (RN) and licensed practical nurse (LPN) may do in their practice. It also prohibits other unlicensed persons from performing functions for which a license is required. In June 1992, the Delegatory Clause was added to the Colorado Nurse Practice Act, and included in the “Rules and Regulations Regarding the Delegation of Nursing Functions,” passed by the Colorado Board of Nursing.

There are very important sections of the Rules and Regulations that every registered school nurse should be aware of. These sections are important even if there are not technologically dependent students in their schools. Administration of medications is under the Delegatory Clause of the Nurse Practice Act.

Criteria for Delegation

School nurses may serve several schools and sometimes several school districts. Therefore, a process by which the school nurse can delegate care for which a license is required to non-licensed persons is necessary. This is possible through the Delegatory Clause of the Nurse Practice Act, but specific criteria must be met:

- Any nursing task delegated by the school nurse shall be:
 - ↳ Within the area of responsibility of the nurse delegating the task.
 - ↳ Within the knowledge, skills, and abilities of the nurse delegating the task.
 - ↳ Of a ***routine, repetitive nature*** and shall not require the delegatee to exercise nursing judgment or intervention.
 - ↳ A task that a reasonable and prudent nurse would find to be within generally accepted nursing practice.
 - ↳ An act consistent with the health and safety of the student.
 - ↳ ***Limited to a specific delegatee, for a specific student, and within a specific time frame.***
- School personnel, to whom the school nurse delegates a task, shall not further delegate that task to another individual, nor may the task be expanded without the express permission of the delegating school nurse.
- The school nurse shall ensure that school personnel can and will perform the task with the degree of care and skill which would be expected of the professional nurse. This means that the task itself is done with the same care and skill, not that the school employee has the nursing knowledge to make nursing decisions about a particular delegated task.

Responsibilities as a Delegator

The decision to delegate shall be based on the school nurse's assessment of the following:

- Student's health care needs, including, but not limited to:
 - ↳ The complexity and frequency of the nursing care,
 - ↳ The stability of the student, and
 - ↳ The degree of immediate risk if task is not carried out.
- School personnel's knowledge, skills, and abilities.
- Nature of the tasks being delegated, including, but not limited to the degree of invasiveness, irreversibility, predictability of outcome, and potential for harm.
- Available and accessible resources, such as appropriate equipment, adequate supplies, and appropriate other health care personnel to meet the student's nursing care needs.
- Availability of the nurse or adequate supervisor of school personnel providing care.

The school nurse shall act in accordance with policies, procedures, protocols, and/or standards of care which limit or prohibit delegation by the school nurse in specified circumstances as established by the school district. If a school district's administration requires the care to be provided only by the school nurse, the care cannot be delegated to a non-licensed person.

The school nurse shall instruct school personnel in the delegated task and/or verify the school personnel's competence to perform the nursing task, as well as how to intervene in any foreseeable risks which might be associated with the task.

The school nurse shall provide appropriate and adequate supervision to school personnel to the degree determined by the school nurse based on an evaluation of all factors indicated above.

The school nurse shall evaluate, on an ongoing basis:

- The degree to which the health care needs of the student are being met.
- The performance by the delegatee of the delegated task.
- The need for further instruction.
- The need to withdraw delegation.

Standards for the Accountability of the School Nurse

The school nurse shall adhere to the provisions of the Nurse Practice Act and its rules and regulations.

The school nurse is responsible for the decision to delegate and assess as indicated in responsibilities of a school nurse as a delegator.

The school nurse is responsible for monitoring, performing outcome evaluations, and following-up with each school personnel to whom a licensed nursing task has been delegated.

The school nurse is accountable for the act of delegating and supervising.

Exclusions from the Rules and Regulations

Exclusions from the Rules and Regulations to the Delegatory Clause of the Nurse Practice Act include:

- Any person registered, certified, licensed, or otherwise legally authorized in this state under any other law engaging in the practice for which such person is registered, certified, licensed, or authorized.
- Any person performing a task legally authorized by any person registered, certified, or licensed in this state under any other law to delegate the task.

The Delegatory Clause of the Nurse Practice Act can be very beneficial to children and youth who need special health care procedures done in the school setting. School nurses play the most important role in making this possible.

Important Points to Remember

Only the school nurse can make the decision to delegate. The decision cannot be made by a parent, physician, school administrator, or licensed practical nurse.

The school nurse can withdraw the delegation of a task for which a license is required at any time. This can be due to a change in the student's condition, school personnel not providing the care correctly, or for any other reason that causes it to be determined not in the best interest of the student or the school nurse delegating the care.

Documentation of delegation of a task for which a license is required is essential. Documentation must be written and specific to the student, the task, the school personnel, and the delegating school nurse.

The school nurse can delegate a specific task, to a specific person, for a specific student, for a specific time frame. It is usually best to train three people for each student who receives special health care. This will provide backup for the primary caregiver. Be sure to periodically check the backup person's ability to give the care correctly.

Medications at school are now included under the Delegatory Clause of the Nurse Practice Act. The school nurse will need to train and delegate the procedure of giving medications in school to school personnel. This delegation and training also needs to be documented.

Technical Skills Chart

- Assist with Dressing (clothing)
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ School Nurse (SN)
 - ⇒ Physical Therapist (PT)
 - ⇒ Occupational Therapist (OT)
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ None.
 - ↳ Remarks
 - ⇒ Student and parent or guardian can inform school personnel of procedures being used in the home.

- Vital Signs
 - ↳ Temperature, Pulse, Respirations (TPR)
 - ↳ Blood Pressure (BP)
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ To Be Determined by SN
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of fluctuating or abnormal TPR.
 - ⇒ Evidence of fluctuating or abnormal BP when BP is to be taken before or after medication or treatment.
 - ↳ Remarks
 - ⇒ Availability of appropriate equipment.

- Height and Weight
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ OT
 - ⇒ PT
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ⇒ Secretary

Technical Skills Chart

(continued)

- ⇒ Specialized Aide
- ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of frequent fluctuations or dramatic changes in weight, arrested growth.
- ↳ Remarks
 - ⇒ Availability of appropriate equipment.
 - ⇒ Record on growth chart.
 - ⇒ Medications might affect fluctuation.
- Fluids/Nourishment
 - ↳ Prepare nourishment as specified in health care plan.
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - OT
 - PT
 - Teacher
 - Food Service Personnel
 - Health Clerk
 - Secretary
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.
 - ⇒ Remarks
 - Student and parent or guardian can inform school personnel of procedures being used at home.
 - Parent or guardian shall provide specialized nourishment.
 - ↳ Feed Students
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - OT
 - PT
 - Teacher
 - Health Clerk

- Secretary
- Specialized Aide
- ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of change in student's oral motor swallowing, positioning, and/or sensory abilities.
- ⇒ Remarks
 - Student and parent or guardian can inform school personnel of procedures being used at home.
- ➔ Hyperalimentation/Lipids
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Never delegated.
 - ⇒ Remarks
 - Requires prescription from physician.
- ➔ Gastrostomy Feedings (tube already in place)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of obstruction, malabsorption, or problem at insertion site.
 - ⇒ Remarks
 - Requires prescription from physician.
 - SN will follow health care plan for reinsertion of tube.
- ➔ Nasogastric Tube Feedings (tube already in place)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of displacement of tube.

Technical Skills Chart

(continued)

- Obstruction of tube.
- Excessive vomiting or diarrhea.
- ⇒ Remarks
 - Requires prescription from physician.
 - SN will follow health care plan for reinsertion of tube.
- Medications
 - ↳ Assist Student in Taking Own Medications
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Medications requiring blood pressure, radial, or apical pulse before or after giving.
 - Medications that require nursing judgment to determine dose.
 - ⇒ Remarks
 - All medications given in school should follow the requirements set forth in the Standards and Regulations for Schools adopted by the Colorado Board of Health.
 - ↳ Give Oral Medications
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Medications requiring blood pressure, radial, or apical pulse before or after giving.
 - Medications that require nursing judgment to determine dose.
 - ⇒ Remarks
 - All medications given in school should follow the requirements set forth in the Standards and Regulations for Schools adopted by the Colorado Board of Health.
 - ↳ Give Medications via Gastrostomy or Nasogastric Tube
 - ⇒ School Personnel That Can Appropriately Provide Care

Technical Skills Chart

(continued)

- Requires prescription from physician.
 - Oxygen and Respirator/Ventilator
 - Oxygen per Mask per Cannula
 - ⇒ School Personnel That Can Appropriately Provide Care
 - Requires prescription from physician.
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of increasing respiratory distress.
 - ⇒ Remarks
 - Requires prescription from physician.
 - Student and parent or guardian can inform school personnel of procedures used at home.
 - Family provides equipment and supplies for the Oxygen.
 - When moving the Oxygen, consider fire hazards in relation to smoking by students and/or school personnel.
 - When storing the equipment, consider fire hazards in relation to smoking by students and/or staff, tampering, theft.
 - Mechanical Nebulizer
 - ⇒ School Personnel That Can Appropriately Provide Care
 - Requires prescription from physician.
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of increasing respiratory distress.
 - Evidence of obstruction.
 - Need for medication.
 - ⇒ Remarks
 - Requires prescription from physician.
 - Student and parent or guardian can inform school personnel of procedures used at home.
 - Family provides equipment and supplies.
 - Availability of alternate power supply.
 - If medications are used, refer to guidelines for medications.

Technical Skills Chart

(continued)

- Suctioning
 - ↳ Tracheostomy Care and Suctioning
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Respiratory distress during suctioning.
 - Evidence of bright red bleeding.
 - ⇒ Remarks
 - Requires prescription from physician.
 - ↳ Oral Suctioning
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.
 - ⇒ Remarks
 - None.
- Respiratory Therapy
 - ↳ Postural Drainage
 - ↳ Percussion
 - ↳ Spirometer (assisting with deep breathing)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - PT
 - OT
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of increasing respiratory distress.
 - ⇒ Remarks

Technical Skills Chart

(continued)

- Requires prescription from physician.
 - Urinary Tract Care
 - ↳ External Catheter
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - Teacher
 - Health Clerk
 - Secretary
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.
 - ⇒ Remarks
 - None.
 - ↳ Intermittent Clean Catheterization
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection.
 - Pain.
 - Bright red bleeding.
 - Inability to insert catheter.
 - ⇒ Remarks
 - Requires prescription from physician.
 - Parent or guardian provides equipment and supplies for catheterization.
 - ↳ Crede Method
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.

Technical Skills Chart

(continued)

- ⇒ Remarks
 - Requires prescription from physician.
 - Student and parent or guardian inform school personnel of procedures being used at home.
- ↳ Indwelling Catheter (care of external equipment only)
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection.
 - Displacement or obstruction of tube.
 - ⇒ Remarks
 - Parent or guardian provides equipment and supplies for catheterization.
- ↳ Peritoneal Dialysis
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Never delegated when Heparin to dialysate.
 - ⇒ Remarks
 - Requires prescription from physician.
 - This is an aseptic exchange procedure.
 - Parent or guardian provides equipment and supplies.
- Bowel and Bladder
 - ↳ Bedpan and Urinal
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - Teacher
 - Health Clerk
 - Secretary
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated

Technical Skills Chart

(continued)

- under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks
 - Availability of appropriate equipment.
- ↪ Care of Incontinent Student
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - Teacher
 - Health Clerk
 - Secretary
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks
 - Parent or guardian to provide supplies of clean clothing.
 - Wear gloves.
- ↪ Stoma Care
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection and/or skin breakdown.
 - ⇒ Remarks
 - Parent or guardian to provide supplies of clean clothing.
 - Wear gloves.
- ↪ Diapering
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)

(continued)

Technical Skills Chart

(continued)

- None.
 - ↳ Reinforcement
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - Evidence of infection.
 - Bleeding or drainage.
 - Complaints of pain or discomfort.
 - ⇒ Remarks
 - None.
- Use of Warm and Cool Applications
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ PT
 - ⇒ OT
 - ⇒ To Be Determined by SN
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ None.
 - ↳ Remarks
 - ⇒ Requires prescription from physician.
 - ⇒ Availability of supplies and equipment.
 - ⇒ Special precautions for students who have diabetes, heart disease, or unstable basal body temperatures.
- Personal Hygiene
 - ↳ Oral Hygiene
 - ↳ Nail Care
 - ↳ Hair Care
 - ↳ Skin Care
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN

Technical Skills Chart

(continued)

- ⇒ PT
- ⇒ OT
- ⇒ Teacher
- ⇒ Health Clerk
- ⇒ Social Worker
- ⇒ Counselor
- ⇒ Secretary
- ⇒ Specialized Aide
- ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of rash, skin breakdown, or infection.
- ↳ Remarks
 - ⇒ May require a physician's authorization to provide this care.
- Decubitus (pressure sores)
 - ↳ Prevention
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - OT
 - PT
 - Health Clerk
 - Teacher
 - Specialized Aide
 - ⇒ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - None.
 - ⇒ Remarks
 - Prevention care to be taught by SN, PT, OT, or physician.
 - ↳ Care
 - ⇒ School Personnel That Can Appropriately Provide Care
 - SN
 - OT
 - PT
 - To Be Determined by SN
 - ⇒ Circumstances Which Require School Nurse (usually not delegated

Technical Skills Chart

(continued)

under given circumstances)

▶ Evidence of granulation and not healing.

⇒ Remarks

▶ Requires prescription from physician.

■ Positioning

↳ School Personnel That Can Appropriately Provide Care

⇒ SN

⇒ OT

⇒ PT

⇒ Health Clerk

⇒ Secretary

⇒ Teacher

⇒ Specialized Aide

↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)

⇒ Evidence of skin breakdown and/or pain on movement.

↳ Remarks

⇒ Availability of adequate equipment and space in school building.

⇒ Positioning to be taught by SN, PT, or OT.

■ Exercises

↳ Range of Motion

↳ Carry Out Prescribed Exercise Program

↳ School Personnel That Can Appropriately Provide Care

⇒ PT

⇒ SN

⇒ OT

⇒ Adaptive P.E. Teacher

⇒ To Be Determined by SN

↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)

⇒ Evidence of pain or more restrictive movement.

↳ Remarks

⇒ Require prescription from physician.

Technical Skills Chart

(continued)

- Ambulation
 - ↳ Assist with Crutches, Walkers, Canes, Wheelchairs, Scooter Boards
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ PT
 - ⇒ SN
 - ⇒ OT
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ⇒ Secretary
 - ⇒ Specialized Aide
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ None.
 - ↳ Remarks
 - ⇒ Availability of appropriate equipment in school buildings.
 - ⇒ A prescription may be required from physician.

- Cast and/or Braces
 - ↳ Observation
 - ↳ Alignment
 - ↳ Functioning
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ OT
 - ⇒ PT
 - ⇒ Adaptive P.E. Teacher
 - ⇒ To Be Determined by SN
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence or impaired circulation, infection, pain, drainage, or bleeding.
 - ↳ Remarks
 - ⇒ May require a prescription from physician.

- Intake/Output

Technical Skills Chart

(continued)

- ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ OT
 - ⇒ PT
 - ⇒ Teacher
 - ⇒ Health Clerk
 - ⇒ Secretary
 - ⇒ Specialized Aide
- ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Changes in usual pattern.
- ↳ Remarks
 - ⇒ Availability of appropriate equipment.
- Specimen Collection
 - ↳ Urine
 - ↳ Stool
 - ↳ Sputum
 - ↳ Blood (finger stick)
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ SN
 - ⇒ To Be Determined by SN
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Evidence of infectious disease.
 - ⇒ Obtaining blood sample.
 - ↳ Remarks
 - ⇒ Requires prescription from physician.
 - ⇒ Health care provider or parent or guardian provides an appropriate collection container and supplies.
 - ⇒ Wear gloves.
- Specimen Testing
 - ↳ Urinalysis (UA)
 - ⇒ School Personnel That Can Appropriately Provide Care

Technical Skills Chart

(continued)

- ⇒ Evidence of malfunctioning.
- ↳ Remarks
 - ⇒ Follow manufacturer's recommendations, current nursing procedures, and home care provider instructions.
- Charting
 - ↳ School Personnel That Can Appropriately Provide Care
 - ⇒ All School Personnel Providing Care
 - ↳ Circumstances Which Require School Nurse (usually not delegated under given circumstances)
 - ⇒ Data on the student and cumulative health records to be done by SN or designee.
 - ↳ Remarks
 - ⇒ Recording forms may be set up by SN for school personnel to check-off when care is given.
 - ⇒ SN always keeps notes of care given.

Universal Precautions

- Attending to others.
 - ↳ Use a barrier when exposure to blood or body fluids is possible.
 - ↳ Bag soiled clothing.
 - ↳ Bag waste and used gloves or barriers.
 - ↳ Wash hands thoroughly.
- Attending to the environment.
 - ↳ Use gloves to clean.
 - ↳ Use disinfectant soaps.
 - ↳ Use disposable cleaning materials.
 - ↳ Disinfect affected areas.
 - ↳ Secure waste in bag for disposal.
- Attending to self.
 - ↳ Remove gloves and place in a plastic bag.
 - ↳ Immediately wash with disinfectant soaps.

Handwashing

- Gather the necessary equipment at the sink.
 - ↳ A sink with hot and cold running water,
 - ⇒ If running water is not available, bring water in a large pitcher or similar container and have a basin nearby or pan to receive waste water.
 - ↳ Liquid soap in a dispenser,
 - ↳ Paper towels,
 - ↳ Lotion, and
 - ↳ A plastic lined waste container.
- Remove any jewelry.
 - ↳ Stones, settings, links, etc. can harbor microorganisms.
- Turn on the water.
 - ↳ Leave the water running until handwashing is complete.
 - ↳ Select a warm water temperature.
 - ⇒ Hot water removes protective oils and will dry out the skin. Cold water is better than none, as friction is the key.
- Wet hands.
- Pump liquid soap from dispenser on to one hand and begin lathering hands and wrists.
 - ↳ Bar soap and soap dishes can provide a media for bacteria growth.
- Wash all surfaces of hands and fingers, and at least two inches above wrists.
 - ↳ Keep fingertips pointed downward and hands lower than elbows to prevent water contaminated with microorganisms from running over clean arms.
 - ↳ Get soap into knuckle folds, between fingers, and thoroughly clean under nails.
 - ⇒ Dirt and microorganisms accumulate in these areas. Use the folded edge of a paper towel to clean nails if nothing else is available.
 - ↳ Use a rotating motion and friction while washing.
 - ⇒ Rub one hand against the other.
 - ⇒ Interlace fingers and thumbs, rubbing up and down.
 - ⇒ Rub fingertips against palms to clean around nail beds.
 - ⇒ Rub wrist and area two inches above with a twisting motion, repeat with second wrist.

Handwashing

(continued)

- Add water as needed.
 - ↳ This may be necessary to maintain a good lather.
- Rinse hands and forearms.
- Use paper towel to wipe the surface around the sink.
 - ↳ Clean and dry surfaces deter the growth of microorganisms.
 - ↳ Discard the paper towel in the waste container.
 - ⇒ Avoid touching the container.
- Dry hands gently and thoroughly with a clean paper towel.
 - ↳ Dry from the hands to the forearms, from the clean to the dirty.
 - ↳ Skin that is properly dried is less likely to chap and split.
- Use paper towel to turn off water.
 - ↳ Discard used paper towels in waste container.
 - ↳ Avoid touching the container.
- Apply lotion as desired.
 - ↳ Keeps skin soft and more resistant to bacteria.
- Document handwashing of self and student on the student's health record or treatment log.
 - ↳ Normally, recording of routine handwashing is not necessary, however, in special circumstances, it may be.

Glove Usage

- Gloves should be worn:
 - ↳ When direct care of a student may involve contact with blood or other bodily fluids.
 - ↳ During contact with urine, feces, and respiratory secretions for control of infection.
 - ↳ When changing a diaper or catheterizing a student.
 - ↳ When changing dressings or sanitary napkins.
 - ↳ When providing mouth, nose, or tracheal care.
 - ↳ If the caregiver has broken skin on his or her hands, including around the nails.
 - ↳ When cleaning up a blood spill (e.g., nosebleeds) or bodily fluids and wastes, and soiled supplies.
- When gloves fail:
 - ↳ Always wash the contaminated area immediately with soap and water.
 - ↳ If a mucus membrane splashes (eye or mouth) or contamination of broken skin occurs, irrigate or wash the area thoroughly.
 - ↳ If cut or punctured with a needle, wash the are thoroughly with soap and water.
 - ↳ In those instances where broken skin, mucus membrane, or needle stick exposures occur, the caregiver should document the incident. The student's parent or guardian should be notified. The person who had the exposure should contact his or her physician for further care as outlined by Center for Disease Control's recommendations.
- Gloves should be disposed of after each use and not reused.

Bodily Fluids

- Blood
 - ↳ Source
 - ⇒ Cuts
 - ⇒ Abrasions
 - ⇒ Nosebleeds
 - ⇒ Menses
 - ⇒ Blood Samples (by fingerprick)
 - ⇒ Contaminated Needle
 - ↳ Organism(s) of Concern
 - ⇒ Hepatitis B virus
 - ⇒ HIV virus
 - ⇒ Cytomegalo virus (CMV)
 - ↳ Transmission
 - ⇒ Bloodstream inoculation through cuts and abrasions on hands.
 - ⇒ Direct bloodstream inoculation.
- Feces
 - ↳ Source
 - ⇒ Incontinence
 - ⇒ Stool Specimens
 - ↳ Organism(s) of Concern
 - ⇒ Salmonella bacteria
 - ⇒ Shigella bacteria
 - ⇒ Rotavirus
 - ⇒ Hepatitis A virus
 - ↳ Transmission
 - ⇒ Oral inoculation from contaminated hands.
- Urine
 - ↳ Source
 - ⇒ Incontinence
 - ⇒ Urine Specimens
 - ↳ Organism(s) of Concern
 - ⇒ Cytomegalo virus

Bodily Fluids *(continued)*

- ↳ Transmission
 - ⇒ Bloodstream, oral, and mucus membrane inoculation from hands.
- Respiratory Secretions
 - ↳ Source
 - ⇒ Saliva
 - ⇒ Nasal Discharge
 - ⇒ Sputum
 - ↳ Organisms of Concern
 - ⇒ Mononucleosis virus
 - ⇒ Common cold virus
 - ⇒ Influenza virus
 - ⇒ Hepatitis B virus
 - ↳ Transmission
 - ⇒ Oral inoculation from contaminated hands.
 - ⇒ Bloodstream inoculation through bites.
- Vomitus
 - ↳ Organisms of Concern
 - ⇒ Gastrointestinal viruses (e.g., Norwalk agent Roavirus)
 - ↳ Transmission
 - ⇒ Oral inoculation from contaminated hands.
- Semen
 - ↳ Organisms of Concern
 - ⇒ Hepatitis B virus
 - ⇒ HIV virus
 - ⇒ Gonorrhea
 - ↳ Transmission
 - ⇒ Sexual contact, intercourse.

Guidelines for Handling Bodily Fluids

Necessary Equipment:

- Soap
- Running Water
- Paper Towels
- Disposable Gloves
- Disposable Plastic Bag
- Plastic-Lined and Covered Waste Container
- Dust Pan
- Bucket
- Mops
- Appropriate Disinfectants

Work With School Administration To:

- Make handwashing the foundation of the disease prevention program.
 - ↳ Handwashing is the single most effective procedure in preventing the spread of communicable diseases.
- Select and purchase appropriate disposable gloves.
 - ↳ Appropriate gloves must be able to hold air or water.
- Select appropriate disinfectants.
 - ↳ Appropriate disinfectants are those registered with the U.S. EPA as “hospital disinfectants” and are tuberculocidal when used in recommended dilutions.
 - ⇒ Ethyl or isopropyl alcohol (70%).
 - ⇒ Phenolic germicidal detergent in a 1% aqueous solution (e.g., Lysol).
 - ⇒ Sodium hypochlorite solution in a 1:10 ratio, prepared daily (e.g., a cup and a half of household bleach mixed with one gallon of water).
 - Avoid skin contact.
 - Wear gloves.
 - Repeated use will corrode metal and discolor materials (e.g., rugs, clothing, etc.).
 - ⇒ Quaternary ammonium germicidal detergent in 2%

Guidelines for Handling Bodily Fluids (continued)

- ⇒ aqueous solution (e.g., Triquat, Mytar, and Sage).
 - ⇒ Iodophor germicidal detergent with 500 ppm available iodine (e.g., Wescodyne).
 - ↪ Follow disinfectant's manufacturer's directions for proper usage, preparation, and storage.
- Develop and implement protocols for handwashing, using disposable gloves, and cleaning and disinfecting items contaminated with bodily fluids.
- Educate the school staff about the potential dangers of infection from bodily fluids.
- Determine the need for any additional precautions to prevent the spread of disease at school.
 - ↪ Review the latest recommendations from your state's Center for Disease Control or Health Department.
- Determine the risk the school as an entity may present to a student who is highly susceptible to infection.
 - ↪ Work with the student's physician to make this determination.
- Specify appropriate protocols for each student in his or her health care plan.
 - ↪ Discuss such protocols with the student's physician and family while during the development process.
- Ensure that all restrooms and classrooms meet environmental standards for schools.

Paraeducators and Universal Precautions

Universal precautions are a series of actions and activities that you will use throughout the school day to keep yourself safe from the risk of infectious diseases or from spreading infectious diseases to others. It is not possible to know who may be a carrier of an infectious disease just by being acquainted with the students or staff in your school.

During a typical school day, you are expected to:

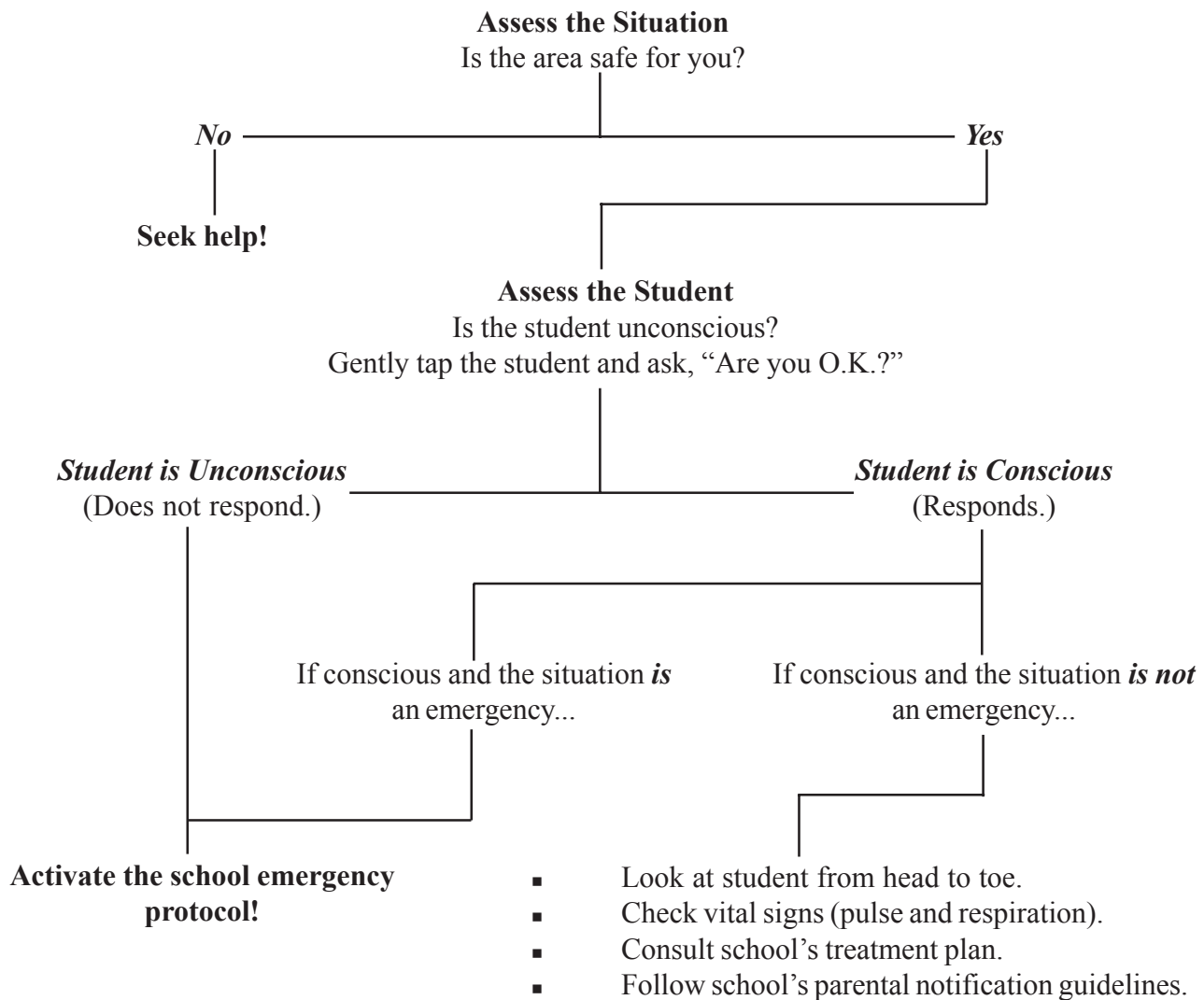
- Wash your hands.
 - ↳ Wash your hands as often as possible, preferably between working with students, just as you might expect a doctor or nurse to do between patients.
 - ↳ Make sure that you wash your hands after handling diapers, Kleenex, equipment that students have used, handling soiled clothing, and before and after handling food (even if you wore protective gloves during these activities).
- Use disposable gloves.
 - ↳ Use the gloves only once.
 - ↳ Use the gloves for any activity that may include contact with bodily fluids of any kind.
 - ↳ Remember, just because you know a student well and are comfortable with them, it does not mean that you can't contract something from them or pass on an infection that you may be carrying.
 - ↳ Wear disposable gloves to deal with any playground emergency or emergency that could put you in contact with bodily fluids.
 - ↳ Wear gloves when assisting a student who has a physically handicapping condition that requires eating assistance, you may come into contact with their saliva.
 - ↳ If you do not know where gloves are kept, ask.
 - ↳ If you are allergic to latex, discuss having non-latex gloves supplied with the school nurse and/or your supervising teacher.

Paraeducators and Universal Precautions (continued)

- Handle bodily fluids.
 - ↳ If a surface has blood or other bodily fluids on it, it will need to be cleaned immediately.
 - ↳ Your supervising teacher, the school nurse, or the school custodial service will know where approved disinfectants are kept.
 - ↳ Each school has specific procedures for cleaning surfaces with these sorts of contaminants on them.

Using universal precautions will greatly increase your personal safety and will protect you from risk of infection from HIV, Hepatitis B, and many other infectious diseases. It also increases the likelihood of better health and the safety of those around you.

Action Guide for Providing Emergency Care



Emergency Priorities

1. Remain calm.
2. Assess the situation.
 - ↳ Be sure the situation is safe for you to approach.
 - ↳ Possible dangers include:
 - ⇒ Live electrical wires.
 - ⇒ Gas leaks.
 - ⇒ Building damage.
 - ⇒ Fire or smoke.
 - ⇒ Traffic.
 - ⇒ Violence.
3. Give immediate attention and call for emergency care and/or ambulance for the victim:
 - ↳ While:
 - ⇒ Not allowing a victim with injuries to head, neck, or back to move.
 - ⇒ Establishing an airway.
 - ⇒ Starting mouth-to-mouth resuscitation, if the person has stopped breathing.
 - ⇒ Performing the Heimlich Maneuver, if the airway is blocked.
 - ⇒ Starting CPR if the victim's breathing and heart have stopped.
 - ⇒ Controlling severe breathing.
 - ⇒ Treating for shock.
 - ⇒ Flushing irritant chemicals from eyes, skin, or mucous membranes with large amounts of water.
 - ↳ And/or, if the victim:
 - ⇒ Is unconscious.
 - ⇒ Is having seizures, but without a previous history of seizures.
 - ⇒ Is having significant difficulty breathing.
 - ▶ The inability to swallow or speak, and/or severe swelling and generalized hives could signal a severe allergic (anaphylactic) reaction
 - ⇒ Has been poisoned.
4. When immediate medical attention is indicated, call for emergency care. Otherwise, whenever possible, contact the parents first.
5. Under no circumstances should a sick or injured student be sent home without the knowledge and permission of the parent, guardian, or other responsible person.



Module B Transparencies

Module B: The Roles of the School Nurse and Paraeducator in Health-Related Services

SgHlthB-T1



- ***Identify the role of the school nurse in health-related services.***
- ***Identify the role of the paraeducator in health-related services.***

Remember...

SgHlthB-T2



- *Only a school nurse can delegate.*
- *A delegated task can be withdrawn at any time by the school nurse.*
- *Documentation regarding the delegation is essential (who, what, where, when, and how).*
- *The school nurse must train the school personnel to do the delegated task and document the training.*
- *Medications given at school are included in the Delegatory Clause of the Nurse Practice Act.*

The School Nurse Must...

SgHlthB-T3



- *Delegate the task.*
- *Teach to master the task.*
- *Document the teaching and mastery of the task.*
- *Remember that he or she remains legally responsible whether or not the task is delegated.*
- *Recognize that some procedures cannot be delegated.*

The Paraeducator Must...

SgHlthB-T4



- *Practice the delegated task until completely comfortable with the task.*
- *Perform the task, as directed by the school nurse, with a specific student.*
- *Document each time the task is performed, as directed by the school nurse.*

Universal Precautions

SgHlthB-T5



Attending to Others

- *Use a barrier when possible exposure to blood or bodily fluids.*
- *Bag soiled clothes.*
- *Bag waste and used gloves or barrier.*
- *Wash hands thoroughly.*

Attending to the Environment

- *Use gloves to clean.*
- *Use disinfectant soaps.*
- *Use disposable cleaning materials.*
- *Disinfect affected area.*
- *Secure waste in bag for disposal.*

Attending to Self

- *Remove gloves and place in plastic bag.*
- *Immediately wash with disinfectant soap.*

Action Guide for Providing Emergency Care

SgHlthB-T6



Assess the Situation

Is the area safe for you?



Assess the Student

Is the student unconscious?

Gently tap the student and ask, “Are you O.K.?”

Student is Unconscious
(Does not respond.)

Student is Conscious
(Responds.)

***Activate the school
emergency protocol!***

**If conscious and the
situation is an
emergency...**

**If conscious and the
situation is *not* an
emergency...**

- Look at student from head to toe.
- Check vital signs (pulse and respiration).
- Consult school’s treatment plan.
- Follow school’s parental notification guidelines.

Emergency Priorities

SgHlthB-T7



- 1. Remain calm.*
- 2. Assess the situation.*
- 3. Give immediate attention and call for emergency care and/or ambulance for the victim.*
- 4. When immediate medical attention is indicated, call for emergency care. Otherwise, whenever possible, contact the parents first.*
- 5. Under no circumstances should a sick or injured student be sent home without the knowledge and permission of the parent, guardian, or other responsible person.*

Module C: Functions of the Body's Systems

Significant Health Support Needs Academy

Module C: Functions of the Body's Systems



A. Module Goals

Using the **Module C: Functions of the Body's Systems** handout and transparency (**H1/T1**), review the goals of the module.

1. Identify body systems and symptoms that require referral to the school nurse.
2. Identify guidelines related to infectious diseases in school-age children.



Note to Instructor: In some states there is a distinction between a school nurse and a registered school nurse. This academy uses the term “school nurse” and makes no such distinction. If this academy is being taught in a state with such a distinction, the instructor will need to adjust the content accordingly, defining the respective job responsibilities accordingly.



Goal 1: Identify body systems and symptoms that require referral to the school nurse.



1.1 Lecture: The Body's Systems

The human body has six systems that are responsible for healthy body function. The systems interact automatically, we do not have to be conscious of these systems in order for them to regulate the part of the body they are responsible for. Present and review the **The Body's Systems** transparency (T2).

- Cardiovascular and Respiratory System
- Musculoskeletal System
- Skin and Hair System
- Digestive and Renal System
- Central and Peripheral Nervous System
- Immune System



1.2 Lecture: The Cardiovascular and Respiratory System

Present and review the **The Cardiovascular and Respiratory System** handout and transparency (H2/T3).

- Functions
 - *Cardiovascular:* Pumps blood throughout the body.
 - *Respiratory:* Exchanges oxygen and carbon dioxide.
- Symptoms that require referral to the school nurse for medical assistance:
 - Increased or decreased heart rate.
 - Rapid or weak pulse rate.
 - Complaints of chest pain.
 - Blue or pale lip color.
 - Difficulty breathing.
 - Violent coughing.
 - Noisy breathing or wheezing.
 - Increased or decreased respiratory rate.
 - Student can't catch breath.
 - Large amounts of mucous.
 - Student tires easily.
 - Student stops running and squats frequently.
 - Complaints of dizziness.

Point out that a child's little finger is about the size of their trachea. Because this is such a small diameter, mucous or other objects that might obstruct the trachea can lead to total blockage of the trachea.



1.3 Lecture: The Musculoskeletal System

Present and review the **The Musculoskeletal System** handout and transparency (H3/T4).

- Function
 - ↳ *Muscles*: Provides the body with strength and mobility.
 - ↳ *Skeletal*: Provides structure for the body, the frame.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Complaints of pain in an arm or leg.
 - ↳ Visible deformity of a limb.
 - ↳ Blue nail beds (toes or fingers).
 - ↳ Bleeding from a wound.
 - ↳ Inability to move an extremity.
 - ↳ Swelling of an extremity.
 - ↳ Joints do not appear aligned.



1.4 Lecture: The Skin and Hair System

Present and review the **The Skin and Hair System** handout and transparency (H4/T5).

- Function
 - ↳ Protects body (barrier) and maintains warmth.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Bleeding from a wound.
 - ↳ Rash or blisters on the skin or scalp.
 - ↳ Itching that is constant and persistent.
 - ↳ Bruising that covers a large area.
 - ↳ Dry, cracked, and bleeding skin.
 - ↳ Swelling and redness on the skin or scalp.
 - ↳ Numbness, prickling, and itching (frostbite) of the cheeks, toes, fingers, nose, or ears.
 - ↳ Cool, moist, pale skin.



1.5 Lecture: The Digestive and Renal System

Present and review the **The Digestive and Renal System** handout and transparency (H5/T6).

- Function
 - ↳ *Digestive*: Turns food and fluids into fuel for the body.
 - ↳ *Renal*: Maintains proper fluid levels for the body.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Nausea or vomiting.
 - ↳ Gagging.
 - ↳ Abdominal pain.
 - ↳ Full, distended, or rigid abdomen.
 - ↳ Pain or difficulty defecating or urinating.
 - ↳ Generalized swelling over the entire body.
 - ↳ Blood in a bowel movement.
 - ↳ Blood in the urine
 - ↳ Diarrhea.



1.6 Lecture: The Central and Peripheral Nervous System

Present and review the **The Central and Peripheral Nervous System** handout and transparency (H6/T7).

- Function
 - ↳ Controls overall body function, movement, and behavior.
 - ↳ Sense of smell, taste, hearing, feeling (touch) are connected to this system.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Headache.
 - ↳ Ear pain.
 - ↳ Large lumps or swollen areas on the head.
 - ↳ Confusion about time, place, person, or events.
 - ↳ Blurred or double vision.
 - ↳ Dizziness.
 - ↳ Loss of muscle coordination.
 - ↳ Loss of sensation in the arms or legs.
 - ↳ Blood or watery fluid from the nose or ears.
 - ↳ Neck pain.
 - ↳ Sleepiness.
 - ↳ Seizures.

- ↳ Unconsciousness.
- ↳ Eyes rolled back or staring.
- ↳ Soft or depressed area on the head.
- ↳ Abrupt changes in attendance.
- ↳ Recent losses in close relationships.
- ↳ Dwindling academic performance.
- ↳ Heavy use of drugs or alcohol.
- ↳ Sudden failure to complete assignments.
- ↳ Generalized fear or anxiousness.
- ↳ Withdrawal or sadness.
- ↳ Bizarre, confused, or disorganized.
- ↳ Lack of interest in activities/surroundings.
- ↳ Changed relationships with classmates.
- ↳ Increased irritability, moodiness, or aggressiveness.
- ↳ Death or suicidal themes in reading selections, written work, or conversations.

Emphasize that if a head or spinal injury is suspected, the student should not be moved. Place hands on both sides of the head, hold it firmly enough to prevent head movement, and call for emergency care and/or ambulance.



1.7 Lecture: The Immune System

Present and review the **The Immune System** handout and transparency (H7/T8).

- Function
 - ↳ Protects the body from disease.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Fever (oral temperature of 101° F).
 - ↳ Cough.
 - ↳ Diarrhea.
 - ↳ Vomiting.
 - ↳ Feeling sick.
 - ↳ Aching all over.
 - ↳ Extreme complaints of feeling tired or weak.



Goal 2: Identify guidelines related to infectious diseases in school-age children.



2.1 Lecture: Infectious Diseases in Schools

In many instances, paraeducators are the personnel most likely to notice or be exposed to a potential illness or disease. They are often the front line of defense and are highly valuable communicators regarding childhood illnesses that exist in the school around them. It is important for paraeducators to examine information regarding infectious diseases that occur in public schools. To know more about infectious diseases is a positive step in assisting in keeping the school safe and healthy for staff and students.



2.2 Activity: Infectious Diseases and Body Systems

Paraeducators will participate in an activity that provides an opportunity to gain a better understanding of various infectious diseases and their impact in the school setting.



2.2.1 Steps

- Have the participants break into small groups.
- Provide each group with markers (black or another dark color) and a large piece of white bulletin board paper (approximately six feet in length).
- Instruct the groups to trace the outline of one member of the group's body onto the bulletin board paper.
- Instruct the groups to label the six body systems reviewed earlier in this academy on the body outline.
- Distribute the **Infectious Disease Guidelines for School Personnel** handout (H8).



Note to Instructor: The handout is a booklet of information regarding some, but not all, infectious diseases encountered in school settings.

- Based on the number of groups, assign each group specific pages of the handout to read, ensuring each group is responsible for an equal amount of information, that all information has been assigned, and that those diseases that carry over more than one page are assigned to the same group. For example, Group 1 reads pages 1, 5, 10, and 15; Group 2 reads pages 2, 6, 11, and 16; and so on. Select pages for each group from multiple areas of the handout, so as to ensure each group is reading about diseases from

various disease groups.

- Instruct the groups to read their assigned pages.
- When finished, instruct the groups to label the body parts or systems that are affected, or potentially affected, by their assigned diseases.
- When finished, have the groups post their posters around the room.
- Have each group briefly review the diseases they covered and their posters with the class.
- As the groups review their diseases, have one member of the group record each disease their group covers on a blank transparency. After each is reviewed, the volunteer should engage the class in a discussion regarding the disease and any personal school experiences the class members may have with it.



Note to Instructor: Due to issues of confidentiality, AIDS/HIV and STDs should not be covered.

- The volunteer should note how many participants have had experience with each disease.
- After all groups have gone, have the group volunteers review the number of participants who stated they had experience with each disease and share with the class which were the most commonly dealt with in the schools represented.
- When finished, emphasize to the participants the critical importance of safety and good health and well-being for all members of the school community. Maintaining the health of students, while doing the same for themselves, should be a goal that all paraeducators aspire to attain. Encourage the paraeducators to return to their schools and be aggressive in asking questions regarding policies and procedures that guard their health and the health of others.

Module C Handouts

Module C: Functions of the Body's Systems

1. Identify body systems and symptoms that require referral to the school nurse.
2. Identify guidelines related to infectious diseases in school-age children.

The Cardiovascular and Respiratory System

- Functions
 - ↳ *Cardiovascular:* Pumps blood throughout the body.
 - ↳ *Respiratory:* Exchanges oxygen and carbon dioxide.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Increased or decreased heart rate.
 - ↳ Rapid or weak pulse rate.
 - ↳ Complaints of chest pain.
 - ↳ Blue or pale lip color.
 - ↳ Difficulty breathing.
 - ↳ Violent coughing.
 - ↳ Noisy breathing or wheezing.
 - ↳ Increased or decreased respiratory rate.
 - ↳ Student can't catch breath.
 - ↳ Large amounts of mucous.
 - ↳ Student tires easily.
 - ↳ Student stops running and squats frequently.
 - ↳ Complaints of dizziness.

The Musculoskeletal System

- Function
 - ↳ *Muscles:* Provides the body with strength and mobility.
 - ↳ *Skeletal:* Provides structure for the body, the frame.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Complaints of pain in an arm or leg.
 - ↳ Visible deformity of a limb.
 - ↳ Blue nail beds (toes or fingers).
 - ↳ Bleeding from a wound.
 - ↳ Inability to move an extremity.
 - ↳ Swelling of an extremity.
 - ↳ Joints do not appear aligned.

The Skin and Hair System

- Function
 - ↳ Protects body (barrier) and maintains warmth.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Bleeding from a wound.
 - ↳ Rash or blisters on the skin or scalp.
 - ↳ Itching that is constant and persistent.
 - ↳ Bruising that covers a large area.
 - ↳ Dry, cracked, and bleeding skin.
 - ↳ Swelling and redness on the skin or scalp.
 - ↳ Numbness, prickling, and itching (frostbite) of the cheeks, toes, fingers, nose, or ears.
 - ↳ Cool, moist, pale skin.

The Digestive and Renal System

- Function
 - ↳ *Digestive:* Turns food and fluids into fuel for the body.
 - ↳ *Renal:* Maintains proper fluid levels for the body.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Nausea or vomiting.
 - ↳ Gagging.
 - ↳ Abdominal pain.
 - ↳ Full, distended, or rigid abdomen.
 - ↳ Pain or difficulty defecating or urinating.
 - ↳ Generalized swelling over the entire body.
 - ↳ Blood in a bowel movement.
 - ↳ Blood in the urine
 - ↳ Diarrhea.

The Central and Peripheral Nervous System

- Function
 - Controls overall body function, movement, and behavior.
 - Sense of smell, taste, hearing, feeling (touch) are connected to this system.
- Symptoms that require referral to the school nurse for medical assistance:
 - Headache.
 - Ear pain.
 - Large lumps or swollen areas on the head.
 - Confusion about time, place, person, or events.
 - Blurred or double vision.
 - Dizziness.
 - Loss of muscle coordination.
 - Loss of sensation in the arms or legs.
 - Blood or watery fluid from the nose or ears.
 - Neck pain.
 - Sleepiness.
 - Seizures.
 - Unconsciousness.
 - Eyes rolled back or staring.
 - Soft or depressed area on the head.
 - Abrupt changes in attendance.
 - Recent losses in close relationships.
 - Dwindling academic performance.
 - Heavy use of drugs or alcohol.
 - Sudden failure to complete assignments.
 - Generalized fear or anxiousness.
 - Withdrawal or sadness.
 - Bizarre, confused, or disorganized.
 - Lack of interest in activities/surroundings.
 - Changed relationships with classmates.
 - Increased irritability, moodiness, or aggressiveness.
 - Death or suicidal themes in reading selections, written work, or conversations.

If a head or spinal injury, is suspected, ***DO NOT MOVE THE STUDENT***. Place hands on both sides of the head, hold it firmly enough to prevent head movement, and call for emergency care and/or ambulance.

The Immune System

- Function
 - ↳ Protects the body from disease.
- Symptoms that require referral to the school nurse for medical assistance:
 - ↳ Fever (oral temperature of 101° F).
 - ↳ Cough.
 - ↳ Diarrhea.
 - ↳ Vomiting.
 - ↳ Feeling sick.
 - ↳ Aching all over.
 - ↳ Extreme complaints of feeling tired or weak.

Infectious Disease Guidelines for School Personnel

Common Indicators of Serious Illness in Children

- Behavior
 - ↳ Children who are acutely ill will have decreased play activity, decreased attention span, increased irritability, and increased lassitude.
- Appetite
 - ↳ Children who are not feeling well will generally have a markedly diminished appetite, particularly for solid food.
- Fever
 - ↳ Any child with a temperature greater than 101°F (38.5 C) orally should be sent home for bed rest. If the fever persists for two days, even without other symptoms, a physician should be consulted.
- Rash
 - ↳ Any child with persistent, generalized rash, whether itchy or not, should be referred to a physician for diagnosis.
- Abdominal Pain
 - ↳ This is, in general, not an indication of serious illness in children. Of course, in any child with acute onset of severe abdominal pain and tenderness on palpitation, the possibility of appendicitis always exists, and a physician should be consulted.
 - ↳ However, most abdominal pain is not of this nature. More likely causes are gastroenteritis (in association with vomiting and/or diarrhea), urinary tract infection (especially in females, often associated with symptoms related to urination), and “functional” pain (cause unknown).
 - ↳ If a child is repeatedly absent from school or falls ill at school due to attacks of abdominal pain, the cause is almost never (less than 2% of such individuals) physical disease or abnormality. Emotional causes (e.g., home is more fun than school) should be carefully looked for and dealt with.

Note: Children with serious chronic illnesses (leukemia, brain tumors, sickle cell anemia, kidney failure, etc.) are almost never absent from school unless they are actually in the hospital.

Infectious Disease Guidelines for School Personnel

(continued)

Danger Signs of Respiratory Disress Requiring Immediate Action by School Nurse, Physician, or Emergency Squad

It is important to determine whether the child is having trouble breathing in or out.

- If inhaling is the problem, the child's upper airway (trachea or windpipe, larynx or voice box, epiglottis, naseo- and oropharynx) is usually the affected area. Problems can be infections, such as croup, a viral infection of the larynx and trachea and epiglottitis, or a bacterial infection of the epiglottis. Problems can also be mechanical, such as an obstruction caused by foreign matter like food or coins stuck in the nose, mouth, or larynx. If the noise on inhaling (stridor) is associated with cyanosis (skin blueness) and/or retractions (sucking in of skin between ribs, above breastbone, and below ribs on inspiring), the child should be seen by a physician as soon as possible.
- If exhaling is causing the child's difficulty, the problem almost always lies in the lower airway, beyond the trachea, within the lungs. Asthma is the most common cause of lower airway obstruction and wheezing its most common symptom. Except in more severe attacks, wheezing may not be audible without a stethoscope. In the most severe attacks, a child may not wheeze at all because he or she is moving very little air in and out of their lungs. These attacks are usually associated with cyanosis and retractions (see above). Any child with audible wheezing (remember, this noise is made on exhaling) should be seen by a physician as soon as possible. Asthma attacks may be precipitated by a number of factors including infections, allergies, and stress.

Infectious Disease Guidelines for School Personnel

(continued)

Common Causes of Rashes

Chicken Pox

Appearance

Papules, blisters, and crusts at the same time.

Distribution

Heavy on trunk, but sparse on extremities.

Symptoms

Itching and cough.

Fifth Disease

Appearance

Begins as solid, bright red eruptions on the cheek (resembles a slapped cheek). Rash frequently disappears, often within a few hours. Not serious. No cause for exclusion from school.

Distribution

Begins on cheeks, then spreads to upper arms and legs, then trunk.

Symptoms

No other symptoms.

Herpes Zoster

Appearance

Clusters of blisters on red bases.

Distribution

A single area of the skin.

Symptoms

Usually preceded by pain, but no other symptoms.

Infectious Disease Guidelines for School Personnel (continued)

Common Causes of Rashes (continued)

Measles

Appearance

Initially red, raised papules that become confluent by the third day. Color progresses from pink to dusky red to reddish brown.

Distribution

Begins around ears and hairline. Concentrated mostly on the face, trunk, and the proximal arms and legs.

Symptoms

Slight itching, if any; high fever persists after onset of rash; and cough.

Pityriasis Rosa

Appearance

First a herald patch, salmon-colored macule with peripheral scaling. After several days, widespread shower of half-inch, oval, salmon pink macules in skin cleavage lines.

Distribution

Usually on trunk, less often only on extremities, and rarely on face.

Symptoms

Itching.

Roseola

Appearance

Small, discrete, rose pink spots.

Distribution

Begins on chest, moves to abdomen, then generalizes.

Symptoms

Fever that breaks as rash appears.

Infectious Disease Guidelines for School Personnel (continued)

Common Causes of Rashes (continued)

Rubella

Appearance

Small, fine, pink spots that may become confluent, but will remain pink.

Distribution

Begins on face. Within 24 hours, moves to trunk. As rash progresses, rashes on previously involved areas may fade.

Symptoms

Swollen lymph nodes at back of the neck are common, joint pain is common in older children, and cough.

Scarlet Fever

Appearance

Pink-red flush with pinhead spots (resembles a sunburn with goosepimples).

Distribution

Entire body, except for area inside elbows and around mouth.

Symptoms

Sore throat and positive throat culture for strep.

Viral Exanthem (usually due to a variety of viruses such as ECHO and coxsackie)

Appearance

Discrete, pink or red macupapular lesions, no vesicles. May be confused with rubella.

Distribution

Generalized.

Symptoms

May be associated with aseptic meningitis.

Infectious Disease Guidelines for School Personnel *(continued)*

AIDS, HIV-Related Illness, and HIV Infections

Acquired Immune Deficiency Syndrome (AIDS) is the most severe manifestation of infection with the Human Immunodeficiency Virus (HIV). Children with AIDS have weakened immune systems, leaving them vulnerable to opportunistic infections such as *Pneumocystis carinii* pneumonia, or cancers, such as non-Hodgkins lymphoma. Children with HIV-related illness may have generalized lymphadenopathy (swollen nodes all over the body) weight loss, chronic fever, chronic diarrhea, and/or profound fatigue. Children infected with HIV may be well for long periods of time, but may develop severe immunodeficiency leading to AIDS or other illnesses as the infection progresses.

Asymptomatic Period

The “window period” refers to the time it takes for antibody tests to become reactive after becoming infected with HIV, usually six months. The asymptomatic period may last up to 10 years or more. In infants under 18 months, a reactive HIV test may indicate maternal antibodies rather than the antibodies of the baby. A confirmed reactive HIV test in a child 18 months or older would indicate that the child is indeed infected.

Periods of Communicability

HIV infection is spread by sexual intercourse, sharing injectable drugs and needles, by receiving a contaminated unit of blood or blood product (which currently occurs extremely rarely), and from mother to child before birth or through infected breast milk. It is not spread by casual social contact in the workplace or school; by touching; sharing food, eating utensils, dishes, or toilet facilities; or insect bites. As of now, it is believed that HIV infection persists for life and all infected persons are infectious as mentioned above.

School and Nurse Responsibility

- AIDS (HIV Related Illness) and HIV infection are reportable to the state’s department of public health or to local health departments.
- The identity of children with AIDS, HIV-related illness, or HIV infection should be known only to the people providing direct care. The penalties for a breach of confidentiality are severe.
- Ordinarily most children with AIDS or HIV infection should be able to attend school without special restrictions.

Infectious Disease Guidelines for School Personnel *(continued)*

AIDS, HIV-Related Illness, and HIV Infections *(continued)*

Future Prevention and Health Education

- All blood and blood products are now screened for antibodies to HIV.
- Most HIV infections in children are a result of the virus crossing the placenta from an infected mother to an unborn child. A small number have resulted from infected breast milk, blood transfusions, and from the receipt of clotting factors (mostly in boys with hemophilia). There have been no cases of children acquiring HIV infection through casual contact with other children or infected care-takers.
- HIV infection is preventable and depends primarily on the behavior change of those infected, or at risk of infection.

Measures to Reduce the Chances of Becoming Infected

- Sexual abstinence.
- Consistent, correct use of latex condoms with all sexual activity (oral, anal, and vaginal).
- Not sharing drug use paraphernalia.

Infectious Disease Guidelines for School Personnel

(continued)

Animal Bites

School and Nurse Responsibility

If a child is bitten by a dog, cat, or other animal, the parents must be notified. A child with an animal bite should have immediate medical treatment, including washing the wound thoroughly with soap and water. Tetanus, prophylaxis should be administered when required. The school is also responsible for notifying the local health department, animal control agency, or police department of any animal bite.

Future Prevention

- All dogs and cats should be vaccinated against rabies.
- Children should be instructed not to provoke, tease, or attempt to pet strange animals, or approach or handle a wild animal.

Regulations

- A dog or cat has bitten a person should be confined for a period of 10 days from the date of the bite. Should the animal become ill or die during the observation period, the doctor or health department should be promptly notified. Never destroy an animal that is being observed for rabies.
- Report all cases of animal bites to the local health department. Consultation services are provided by local and state health agencies.
- Each bite must be evaluated individually and there are multiple factors that influence the need for anti-rabies prophylaxis. The treating physician and health department epidemiologist should evaluate these factors and reach a decision concerning the best course of action.

Health Education

- Skunks and bats have rabies until proven otherwise.
- Rodents and rabbits are not considered carriers of rabies and bites from these animals rarely, if ever, call for anti-rabies treatment.
- Children should never attempt to play with wild animals nor should they tease or otherwise provoke any pet.

Infectious Disease Guidelines for School Personnel

(continued)

Chicken Pox (Varicella)

An acute viral illness of sudden onset characterized by fever, cough, fatigue, and a generalized eruption of the skin. Each skin lesion begins as a small papule which becomes blister-like for three or four days, then leaves a granular scab. Several crops of these vesicles will come out over a period of days, so that at any time there will be lesions in various stages of development. Lesions tend to be more abundant on the trunk than on exposed parts of the body and may appear on such areas as the mucous membranes of the mouth, the scalp and upper respiratory tract. Transmission of this highly contagious disease is via person to person spread, even indirectly through fomites. Herpes zoster (shingles), caused by the same virus, is a localized eruption in someone previously infected with chickenpox and can also cause chickenpox in an exposed child.

Incubation Period

Two to three weeks, commonly 13-17 days.

Period of Communicability

From as long as five days before the rash appears to not more than five days after the first crop of vesicles.

School and Nurse Responsibility

- Official report to local health department is not necessary.
- Referral to physician optional.

Control of Spread

- Exclusion of affected child from school until all lesions have crusted and there are no “weeping” vesicles.
- Disposal of articles soiled with nose and throat discharges.
- Varicella Zoster Immune globulin (VZIG) may be given to some contacts at very high risk.

Future Prevention

A single dose of the chicken pox vaccine is recommended for all children at between 12 and 18 months. Previously unimmunized adolescents (age 13 years and older) who have never had chicken pox should receive two vaccine doses.

Infectious Disease Guidelines for School Personnel *(continued)*

Chicken Pox (Varicella) *(continued)*

Health Education

- Persons at serious risk for chicken pox include those adults and children with altered immunity; on immuno-suppressive drugs; and with diseases, such as leukemia or Hodgkin's disease.
- Persons exposed to shingles may develop chicken pox if they have never had it before.
- Aspirin should be avoided in chicken pox because it appears to increase the risk of Reye's Syndrome, a serious disorder that can lead to coma and death.
- If a medicine to lower temperature or reduce discomfort is necessary, acetaminophen-containing medicines are recommended.

Infectious Disease Guidelines for School Personnel

(continued)

Common Cold

An upper respiratory illness of acute onset characterized by runny nose, watery eyes, chilliness, and malaise lasting two to seven days. Significant fever is uncommon in children and rare in adults. Colds are transmitted person to person via airborne droplets.

Incubation Period

12-72 hours, usually 24 hours.

Period of Communicability

One day before onset of symptoms and until five days afterward.

School and Nurse Responsibility

- Official report to local health department is not necessary.
- Referral to physician if secondary complications develop.

Control of Spread

- Careful disposal of articles soiled with nose and throat discharge.
- Exclusion from school not essential.

Future Prevention

No immunization available.

Health Education

The common cold can be caused by any of at least 90 different viruses. Common colds predispose individuals to secondary bacterial complications such as bronchitis, sinus infections, middle ear infections, and laryngitis. In addition, the common cold has considerable impact on work performance and industrial and school absenteeism. School personnel need to reinforce the habits of covering the mouth and nose while coughing, hand washing before eating, and proper disposal of soiled articles.

Infectious Disease Guidelines for School Personnel

(continued)

Infectious Diarrhea

Many types of infectious diarrhea occur, the most common are described below.

Campylobacter

An acute bacterial disease of the large intestine characterized by diarrhea, frequently blood-tinged, low-grade fever, and cramps. Person-to-person transmission by fecal-to-oral route or from contaminated food, water, or milk.

Incubation Period

One to seven days, commonly three to five.

Period of Communicability

During acute infection and while organisms persists in stool. Carrier states, if present, are short.

School and Nurse Responsibility

- Suspect illness should be referred to local physician.
- Confirmed cases should be reported to local health departments.

Control of Spread

- Symptomatic children should be excluded from school until free of diarrhea, or until cleared by their physician.
- Asymptomatic children should not be excluded from school.
- Food handlers with symptoms suggesting campylobacter infection should be excluded from work until cleared by physician or health department.
- Special measures are necessary in preschools.
- Treatment of cases renders them non-infectious within 24 hours and may shorten the duration of illness.

Future Prevention

Reinforcement of principles of personal hygiene in young children, especially hand-washing after using the toilet and before eating.

Health Education

Diagnosing a specific cause of infectious diarrhea is difficult in school settings. All cases of diarrhea in children, especially if accompanied by fever and cramps, should be referred to a physician.

Infectious Disease Guidelines for School Personnel

(continued)

Infectious Diarrhea (continued)

Giardia

An acute parasitic disease, involving the small and large intestine and characterized by diarrhea, cramps, excess gas, and, in more severe cases, vomiting and weight loss. Fever and bloody stools are rare. Transmission can be fecal-to-oral, person-to-person, or by contaminated water.

Incubation Period

5 to 15 days, commonly six to nine days.

Period of Communicability

Throughout acute infection and as long as the organism persists in the stool. A small percentage of cases become long-term well carriers.

School and Nurse Responsibility

- Suspected illness should be referred to physician.
- Confirmed cases should be reported to health department.

Control of Spread

- Symptomatic children should be excluded from school until free of diarrhea, or until cleared by their physician (treatment with antibiotics usually makes children non-infectious within a few days).
- Asymptomatic children should not be excluded from school.
- Food handlers with symptoms suggesting giardia should be excluded from work until cleared by physician or health department.
- Special measures are necessary in preschools.

Future Prevention

Reinforcement of principles of personal hygiene in young children, especially hand-washing after using toilet and before eating.

Infectious Disease Guidelines for School Personnel (continued)

Infectious Diarrhea (continued)

Salmonella

Unlike many other forms of gastroenteritis, salmonella infection is almost always accompanied by fever. There are many different types of salmonella. Almost all forms cause abdominal pain, nausea, and vomiting, in addition to diarrhea and fever. In many cases, blood, mucus, or pus may be in stool. Salmonella is transmitted person-to-person, fecal-to-oral contamination, or through contaminated food or milk.

Incubation Period

Two to three days, usually 12-36 hours.

Period of Communicability

Throughout the course of the illness. A small percentage of cases become long-term well carriers.

School and Nurse Responsibilities

- Suspected illness should be referred to physician.
- Confirmed cases should be reported to local health department within seven days.

Control of Spread

- Symptomatic children should be excluded from school until free of diarrhea.
- Consultation with physician or local health department should occur prior to any asymptomatic, culture-positive student's return to school.
- Food handlers with symptoms suggesting salmonellosis should be excluded from work until cleared by physician or health department.
- Special measures are necessary in preschools.
- Cases should not be treated with antibiotics unless very ill, because this prolongs excretion of the Salmonella in the stool.

Future Prevention

No immunization is available. Reinforcement of principles of personal hygiene in young children, especially hand-washing after using the toilet and before eating.

Infectious Disease Guidelines for School Personnel (continued)

Infectious Diarrhea (continued)

Shigella

An acute bacterial disease involving the large intestine characterized by diarrhea, fever, vomiting, cramps, and urgency. In many cases, blood, mucus, or pus may be in the stool. Transmission of shigella is via fecal to oral transmission.

Incubation Period

One to seven days, usually one to three.

Period of Communicability

Throughout acute infection and as long as organism persists in stool. Carrier states are usually short.

School and Nurse Responsibilities

- Suspected illness should be referred to physician.
- Confirmed cases should be reported to the local health department.

Control of Spread

- Symptomatic children should be excluded until free of diarrhea, or until cleared by their physician (antibiotic treatment usually makes children non-infectious within a few days).
- Asymptomatic children should not be excluded from school.
- Food handlers with symptoms suggesting shigellosis should be excluded from work until physician or health department clearance.
- Special measures are necessary for preschools.

Future Prevention

Reinforcement of principles of personal hygiene in young children, especially hand-washing after using the toilet and before eating.

Infectious Disease Guidelines for School Personnel *(continued)*

Infectious Diarrhea *(continued)*

Viral Gastroenteritis

The epidemic form is also called “winter vomiting disease” and is characterized by low-grade fever, nausea, vomiting, cramps, and diarrhea. Duration is usually one to two days. Viral gastroenteritis is passed mainly through the fecal to oral route.

Incubation Period

One to two days.

Period of Communicability

During symptoms and shortly thereafter.

School and Nurse Responsibilities

- Clusters of illness should be reported to local health department.
- Severe cases can be referred to physician.

Control of Spread

- Reinforcement of strict personal hygiene, since disease may be spread by fecal-to-oral route
- Exclusion is not mandatory.
- Affected children may not feel well enough to attend school. If doubt exists as to the cause of diarrhea, it is best to refer to a local physician.

Future Prevention

No immunization is available. Reinforcement of principles of personal hygiene in young children, especially hand-washing after using the toilet and before eating.

Although it is often referred to as “stomach flu” or “intestinal flu,” viral gastroenteritis is not caused by the influenza virus and is not preventable by influenza immunization.

Infectious Disease Guidelines for School Personnel

(continued)

Diphtheria

An acute infectious disease of the oral cavity, nose, or skin caused by bacterium. The throat may appear inflamed, and patches of grayish membrane may be seen in the throat. The lymph nodes of the neck tend to be enlarged. Diphtheria is transmitted person-to-person by airborne droplets

Incubation Period

Two to five days.

Period of Communicability

Usually two weeks or less, but carriers may shed organisms for up to six months.

School and Nurse Responsibilities

- Official report to local health department is mandatory within 24 hours in confirmed cases.
- Suspected cases should be referred to local physician immediately.

Control of Spread

Exclusion from school is mandatory until the child has two negative cultures more than 24 hours apart, and more than 24 hours of cessation of antibiotic treatment per doctor's order have passed.

Future Prevention

- All children should be immunized with a series of three diphtheria shots (DPT) in the first year of life. A booster dose should be given during the second year of life and again at the time of school entry
- Intimate contacts (siblings, etc.) of known cases should be excluded until their cultures are negative.

Health Education

Although distinctly uncommon today, sporadic cases of diphtheria do continue to occur, especially in unvaccinated populations, such as those whose religious beliefs will not allow immunization. Any severe sore throat should be referred to a physician for evaluation.

Infectious Disease Guidelines for School Personnel

(continued)

Hepatitis A (Infectious Hepatitis)

An inflammation of the liver caused by a virus. Symptoms are usually abdominal discomfort, loss of appetite, nausea, low-grade fever, and tiredness, followed by dark urine and clay colored stools. Adults and older children also experience yellowing of the skin and eyes (jaundice). Children under three or four frequently do not have symptoms or have mild symptoms that are not recognized as hepatitis. An antibody test (HAV-IgM) will confirm a current or recent case of hepatitis A. Transmission via fecal to oral.

Incubation Period

15 to 50 days, usually 28 to 30 days

Period of Communicability

For approximately two weeks before symptoms begin, and one to two weeks after symptoms begin.

School and Nurse Responsibilities

- Report to local health department within 24 hours is mandatory.
- Referral to physician is mandatory.
- Consult with health department to evaluate whether anyone should receive immune globulin. Close friends or playmates may need immune globulin, however, in most instances, teachers and classmates are not at risk of becoming infected.

Control of Spread

- Exclude from school until one week after onset of jaundice and until well enough to attend school.
- Immune globulin should be administered to family and other close contacts of cases. It must be administered within two weeks of exposure in order to be effective in preventing the disease.
- In preschool and day care settings, it may be necessary to give immune globulin to all children and staff, and, in some circumstances, to parents and siblings of all children. Consult local or state health departments to evaluate the need for immune globulin in these settings.
- Persons with hepatitis A must not work as food handlers.

Infectious Disease Guidelines for School Personnel *(continued)*

Hepatitis A (Infectious Hepatitis) *(continued)*

Future Prevention

Hepatitis A vaccine has been available since 1995. The vaccine is likely to provide protection against hepatitis A for 20 years or longer.

Health Education

The importance of *good handwashing* after using the toilet and before fixing and before eating food cannot be overemphasized.

Infectious Disease Guidelines for School Personnel

(continued)

Hepatitis B (Serum Hepatitis)

The onset is generally less abrupt than hepatitis A, but symptoms tend to be similar. Severity of the disease can vary from inapparent and mild to severe and fatal.

Incubation Period

Six weeks to six months, usually two to three months.

Period of Communicability

As long as the virus is in the blood. Several weeks before the onset of symptoms, throughout the clinical course of the illness, and, in some cases, into a carrier state that may last for many years.

School and Nurse Responsibilities

- Report to local health department within seven days is mandatory.
- Referral to a physician is mandatory.

Control of Spread

- Cases of hepatitis B should be excluded from school only until a physician or local health department determines that the case is not hepatitis A.
- Blood spills should be cleaned with a bleach solution, OSHA precautions should be implemented.
- Handwashing measures.

Future Prevention

Hepatitis B vaccine is increasingly recommended as part of a typical immunization course for infants, school age children, and selected high-risk groups (sexually active individuals and IV drug users).

Health Education

It is impossible to distinguish between hepatitis A and B clinically. Hepatitis B is less likely in school age populations, with the exception of IV drug users and children born to HbsAg positive mothers usually from endemic countries. It is important to determine the type of hepatitis so that appropriate control measures can be implemented.

Infectious Disease Guidelines for School Personnel

(continued)

Hepatitis C

Onset is usually less abrupt than hepatitis A, but symptoms are similar. Disease severity ranges from inapparent infection to severe cases and is rarely fatal. Chronic liver disease may develop.

Hepatitis C is primarily spread by inoculation of infective blood or blood products. Transmission between sexual partners and from mothers to their newborn infants is thought to occur infrequently. Transmission between IV drug users who share needles is common.

Incubation Period

Two weeks to six months, usually six to nine weeks.

Period of Communicability

Begins shortly before onset, and as long as the virus is present in the blood, for life in most cases.

School and Nurse Responsibilities

- Report to local health department within seven days is mandatory.
- Referral to physician is mandatory.

Control of Spread

- Cases of hepatitis should be excluded from school until physician or local health department gives clearance to return, usually when it is determined the case is not hepatitis.
- Gamma globulin is not useful in preventing hepatitis C.

Future Prevention

No vaccine is available.

Health Education

- Always practice universal precautions when handling blood or blood products.
- Hepatitis C cannot be distinguished from hepatitis A or B clinically. It is important to determine the type of hepatitis so that appropriate control measures can be implemented.
- Hepatitis C virus is not spread through casual contact in a typical school setting.

Infectious Disease Guidelines for School Personnel

(continued)

Impetigo

A skin eruption caused by the streptococcus organism (with or without staphylococci) that may proceed through vesicular, pustular, and encrusted stages. Infections may be spread by direct contact with secretions from these lesions.

Incubation Period

Usually one to three days.

Period of Communicability

As long as poor hygiene persists. Discharges from lesions are infectious.

School and Nurse Responsibilities

- Group outbreaks of disease should be reported to local health department.
- Referral to a physician is recommended.

Control of Spread

- Exclusion from school is not essential unless physician suggests it.
- Antibiotics will decrease spread of disease, decrease incidence of secondary infection, and speed healing.

Future Prevention

No vaccine is available.

Health Education

Rheumatic fever does not occur as a result of streptococcal skin infection, but acute glomerulonephritis (kidney inflammation) may develop in a small percentage of cases. It is not known if treatment with appropriate antibiotics will prevent this from occurring.

Infectious Disease Guidelines for School Personnel

(continued)

Influenza

An acute upper respiratory infection characterized by abrupt onset of fever, cough, and muscle aches. Headache and sore throat may be common. Influenza is spread person to person via airborne droplets, and tends to occur in noticeable epidemics.

Incubation Period

24 to 72 hours.

Period of Communicability

Probably limited to three to four days, from slightly before clinical onset to about three days after.

School and Nurse Responsibilities

- Report significant increases in school absenteeism resulting from influenza-line illness to local health department.
- Referral to physician for exceptionally severe cases.

Control of Spread

- Susceptibility to a new strain is universal.
- No exclusion is necessary.
- School closure is not indicated to control spread.

Future Prevention

Vaccines are available for current strains each year, with recommendations regarding who should receive it revised yearly. In general, anyone who does not wish to contract influenza may receive the vaccine, but children with chronic lung disease or metabolic disease (e.g., asthma, cystic fibrosis, diabetes, kidney disease, or heart disease) should be vaccinated annually.

Health Education

Persons most at risk for complications from influenza are the elderly, the chronically ill, and infants. In general, otherwise healthy children tolerate influenza well and suffer only a few days of discomfort. Outbreaks of influenza can cause large increases in absenteeism rather suddenly. Health department consultation is available in these situations. Aspirin should be avoided in influenza because it appears to increase the risk of Reye's Syndrome, a serious disorder that can lead to coma and death. If a medicine to lower temperature or reduce discomfort is necessary, acetaminophen containing medicines are preferred.

Infectious Disease Guidelines for School Personnel

(continued)

Lice (Pediculosis)

An acute infestation of the head or other hairy parts of the body or clothing with adult lice, larvae, or nits (eggs). Crab lice infest the pubic area and, occasionally, eyelashes. Itching is the primary symptom, although most infestations are asymptomatic.

Incubation Period

Eggs hatch in one week and the resultant lice are capable of multiplying in two weeks.

Period of Communicability

As long as lice remain on the infested person, and until eggs in hair and clothing are dead.

School and Nurse Responsibilities

- Official report to local health department optional, but consultation is available.
- Referral to a physician may be necessary.

Control of Spread

- Children can return to school following their first treatment with an effective anti-lice shampoo (containing pyrethrin or permethrin), which can be purchased over the counter at any pharmacy. At this point they will be free of adult lice and not infectious. Parents can be urged to comb out the nits as well (special combs for this procedure are available at pharmacies), but children who have completed their first treatment should not be excluded from school only because nits are present. A second treatment must be given in 10 days; this will take care of any nits that have subsequently hatched, although most nits will be killed by the first shampoo.
- Parents should be instructed regarding in-home control measures, including laundering all clothing and bedding used within two weeks of infestation in hot soapy water. Brushes and combs should be washed after treatments.
- If repeated infections occur, despite proper treatment, an investigation for unrecognized cases among companions or household members should be undertaken. It may be necessary to treat a whole household at once, with simultaneous laundering of everyone's clothing and bedding. Insecticide treatment of the home is not indicated.

Future Presentation

Through health education of parents, students, and school personnel.

Infectious Disease Guidelines for School Personnel *(continued)*

Lice (Pediculosis) *(continued)*

Health Education

Numerous over the counter remedies are available for treating pediculosis and are effective if used in appropriate doses. Packaging instructions should be followed scrupulously. Prescription medications such as Kwell have been associated with some side effects and are no more efficacious than over the counter products.

Household pets are not a source of lice. We have our own species of “human” lice that do not live on animals. Nits on the hair shaft that are ¼ to ½ inch or more away from the scalp have either hatched or are not viable and is not indication of reinfestation or need of treatment.

Infectious Disease Guidelines for School Personnel

(continued)

Measles (Rubeola)

Measles is an acute, viral illness that begins with fever, tiredness, cough, runny nose, and inflamed eyes. These symptoms usually worsen over three days, with the cough worse at night and eye inflammation resulting in avoidance of light. At this state, there may be small white spots on a red base (Koplik spots) present inside the mouth, on the cheek. By the third to seventh day, a rash begins at the hair line which spreads over the entire body within a day or two. Once the rash reaches the legs, the rash on the head and face begins to fade. The rash, red with papules and macules, is usually gone after six days, and the cough may be last to disappear. A child with measles feels quite ill and looks “measley.” The disease is highly contagious and is transmitted by direct contact with an infected individual, through the respiratory route.

Incubation Period

Between 8 and 14 days, usually about 10 days.

Period of Communicability

From a day or two before onset of prodromal symptoms, through the first four days of rash.

School and Nurse Responsibility

- Mandatory report within 24 hours of any suspect case to local health department by name, address, and phone number of patient.
- Referral to a physician.

Control of Spread

- Exclude case from school until four days after appearance of rash.
- Check immunization status of schoolmates and exclude children who cannot show proof of adequate immunization as defined by the local or state health department.

Future Prevention

Live, attenuated measles virus vaccine, in combination with mumps and rubella (MMR), is routinely given at 12 to 15 months, providing greater than 95% immunity. A second MMR is recommended at 4 to 6 or 11 to 12 years. Some states require two MMR immunizations of seventh-graders.

Health Education

Measles may be known as just a “childhood illness,” but can result in serious consequences, such as severe pneumonia, encephalitis, and hemorrhage into the intestinal tract and brain. The complications are not uncommon and may have life-long debilitating consequences.

Infectious Disease Guidelines for School Personnel

(continued)

Meningitis

An acute inflammation of the lining of the brain and spinal cord, accompanied by stiff neck and fever. Can be caused by many different viruses, bacterium, and fungi. Most forms, both viral and bacterial, are not particularly contagious. Spread, when it does occur, is generally person to person via airborne droplets. Symptoms may include a rash that resembles rubeolla (German measles), drowsiness, and some extremity weakness. Recovery is usually complete. Some forms of meningitis are more common in late summer and early autumn. Haemophilus influenza meningitis, the most common form in toddlers, is not dealt with here because it infrequently affects school age children.

Incubation Period

Varies with the virus involved.

Period of Communicability

Varies with the virus involved.

School and Nurse Responsibility

- Official report to local health department within seven days is mandatory.
- Referral to a physician is mandatory.

Control of Spread

- No exclusion recommended for viral meningitis. The main concern is to be sure that bacterial meningitis has not been missed.
- Eating and drinking utensils and articles soiled by secretions of child should be adequately disinfected in a hot dishwasher.

Future Prevention

Routine childhood immunizations, as recommended by state health department, should be current.

Health Education

Causes of aseptic meningitis are numerous and include coxsackie and echo viruses, polio virus, measles, chickenpox, mumps, and herpes virus. Many bacterial causes (TB and syphilis) can mimic viral meningitis. Meningitis similar to this can also occur after some types of vaccinations. It is most important to recognize symptoms and refer any suspect illness to appropriate medical care. Increases in aseptic meningitis occur regularly in late summer and fall and are not a cause for alarm.

Infectious Disease Guidelines for School Personnel

(continued)

Meningococcal Meningitis

In contrast to viral meningitis, bacterial forms of meningitis are medical emergencies. Symptoms of meningococcal meningitis include high fever, nausea, vomiting, stiff neck, and prominent rash (usually small, red patches that become confluent as the disease progresses). Fatality can be as high as 10%, even with prompt diagnosis and treatment. In severe cases of meningococcal septicemia, life-threatening illness may occur before symptoms of meningitis are evident.

Incubation Period

Two to ten days, commonly three to four days.

Period of Communicability

Until the meningococcus is no longer present in discharge from the nose and mouth, susceptible organisms will disappear from the nasopharynx within 24 hours after appropriate treatment. Carrier rates of 25% or more may exist without clinical infection.

School and Nurse Responsibilities

- Official immediate report to local health department is mandatory within 24 hours.
- Immediate physician referral for suspect cases mandatory.

Control of Spread

- Exclusion from school until physician releases the student.
- Household or other intimate contacts (girlfriend, boyfriend, etc.) should be referred to physician or local health department for antibiotic prophylaxis.
- Schoolroom classmates, teachers, or other school personnel do not require prophylaxis unless they have had prolonged, close exposure beyond the classroom.
- Immunization with meningococcal vaccine may be recommended in the school setting under unusual circumstances.

Future Prevention

Vaccine is available for certain types of meningococcal infection in certain circumstances.

Health Education

Although meningococcal meningitis is the most contagious and lethal of the bacterial meningitis diseases, all suspect cases of any meningitis should receive immediate medical referral. Recognition is the key. Risk of acquiring the disease in a normal classroom situation is quite small.

Infectious Disease Guidelines for School Personnel

(continued)

Mumps

Mumps is a viral illness caused by the paramyxovirus. The main manifestation of mumps is parotitis, or painful inflammation of the salivary glands that lie just above the back angle of the jaw. Can be one-sided or bilateral and other salivary glands, including those in the floor of the mouth beneath the tongue and below the jaw, can also be involved. Patients often have high fever, headache, and mild respiratory symptoms. In post-pubertal children, the gonads may be involved with testicular pain (males) or lower abdominal pain (females). Mumps very rarely lead to sterility in post-pubescent males. Symptoms generally resolve after seven to ten days. Transmission by droplet spread and direct contact with saliva of an infected person. Some individuals exposed to mumps will not develop the disease, but will be infectious. Immunity from mumps is life-long.

Incubation Period

14 to 21 days, usually 18 days.

Period of Communicability

From seven days before to nine days after the swelling first appears.

School and Nurse Responsibilities

- Report mumps to the local health department within seven days.
- If mumps is suspected the patient should be referred to a physician.

Control of Spread

- The affected individual should be isolated until swelling and other manifestations have subsided
- Post-exposure vaccination may not protect against the disease and its complications, but it is not contraindicated.

Future Prevention

A live mumps virus vaccine is routinely given at 12 to 15 months in combination with measles and rubella vaccine (MMR). A second MMR is recommended at age 4 to 6 or 11 to 12 years. Many states require two MMR immunizations of seventh-graders. Mumps immunization is particularly important for post-pubertal males.

Infectious Disease Guidelines for School Personnel *(continued)*

Mumps *(continued)*

Health Education

The main dangers of mumps are the rare long-term neurologic consequences of mumps meningoencephalitis. These include nerve deafness, myelitis, and facial neuritis. These sequelae, although rare, are the main justification for early vaccination since the vaccine itself is without known complications. Natural infection confers life-long immunity; therefore, if parotitis recurs, other causes should be investigated.

Infectious Disease Guidelines for School Personnel

(continued)

Pertussis (Whooping Cough)

Pertussis is a bacterial, respiratory infection caused by *bordetella pertussis*. May begin with cold-like symptoms, which progress to a cough, or the child may simply begin coughing. After several days, severe coughing fits may cause the child to vomit after coughing or to have spells of breathlessness. Sometimes a high-pitched crowing (the whoop) is heard with inhaling after a coughing spell. The coughing can last one to three months. Diagnosis is made by culturing specimens from the nasal passages. In young infants, the disease can be fatal; in older children, who were never immunized or show immunity has diminished over a period of years, the disease can vary from quite mild to a prolonged bout of uncomfortable, exhausting paroxysmal coughing lasting several months. Whooping cough is rarely fatal in children over the age of two. Transmission is by direct contact with droplets from the nose and throat of the infected person.

Incubation Period

Commonly seven days, almost uniformly within ten days, and not exceeding three weeks.

Period of Communicability

Greatest in the early stages. Individuals are virtually never infective after the third week of the disease, or after five to seven days of antibiotic treatment.

School and Nurse Responsibility

- Pertussis should be reported to the local health department within seven days.
- If pertussis is suspected, the affected individual should be referred to a physician.
- If pertussis has been confirmed and the individual is not treated with antibiotics, he or he should be excluded from school until three weeks after the onset of the illness or until the cough has stopped, whichever period is shorter. If treated, the individual may return after five days of treatment.

Control of Spread

All household or other close contacts (regardless of DPT immunization status) should receive oral erythromycin for 14 days, and, if symptomatic, should be excluded from work or school until they have received 5 days of the 14-day course of antibiotics. Children who are greater than seven years of age and who are household or other close contacts of a pertussis case should receive DPT vaccine if:

- They are not age appropriately immunized, or
- Their last DPT dose was more than three years ago.

Infectious Disease Guidelines for School Personnel

(continued)

Pertussis (Whooping Cough)

(continued)

Future Prevention

Pertussis vaccine, given along with diphtheria and tetanus toxoid in the recommended schedule, is an effective means of prevention in childhood and early adolescence. Protection declines with time since the last dose.

Health Education

Pertussis is a serious, potentially fatal, and, at best, debilitating disease of early childhood which can be prevented by vaccine. Vaccine-acquired immunity begins to wane during adolescence, making these individuals susceptible once more. The risks of this disease are not as serious, however, in older groups and it is felt that under most circumstances, persons older than seven should not be revaccinated with pertussis containing vaccine because the risks of vaccination complication then outweigh risks from the disease.

Infectious Disease Guidelines for School Personnel

(continued)

Poliomyelitis (Infantile Paralysis)

Poliomyelitis is an illness which begins in a very quiet way. It is a viral infection, and its initial symptoms include fever, tiredness, and gastrointestinal upset. The disease may resolve after 24-48 hours and classified as minor, or it may progress to include marked stiffness of the neck and back. If spinal fluid was sampled at this point, it would reveal viral (aseptic) meningitis, and if the disease then resolved, it would be called non-paralytic poliomyelitis. If the disease continues to worsen, symptoms include pain and tenderness in affected muscles and a short period of increased tone in those muscles followed by flaccid paralysis with the loss of involved reflexes but preservation of sensation over the muscles. Paralysis worsens for about a week, followed by a stable period of days to weeks. Muscle strength and reflexes can return gradually over 12 to 18 months, at which point, any recovery usually ceases and the final extent of paralysis is clear. It should be remembered that polio is a viral infection of nerves not muscles, and can affect the nerves that control the muscles of respiration (that's why iron lungs were and could continue to be necessary in polio epidemics). Transmission is not well understood and may spread via contact with infected droplets or feces.

Incubation Period

3 to 5 days for minor, 5 to 35 days for non-paralytic, and 7 to 14 days for paralytic.

Period of Communicability

Not well known. Virus persists in the throat for one week, in the feces for four to six weeks or longer.

School and Nurse Responsibilities

- The affected individual should be referred to a physician.
- Confirmed cases must be reported to the local health department within 24 hours.
- Confirmed cases should be excluded from school only until released by physician or health department.

Control of Spread

Good personal hygiene and washing hands after using the toilet and before eating.

Infectious Disease Guidelines for School Personnel (continued)

Poliomyelitis (Infantile Paralysis) (continued)

Future Prevention

There are two available vaccines: the Salk (inactivated polio vaccine, *IPV*), which is given by injection, and Sabin (live polio vaccine, *OPV*), which is given orally. *OPV* is currently the vaccine of choice, and, when given in recommended dosage schedules, is completely effective at preventing disease. *IPV* is recommended in certain specific situations.

It should be noted that approximately one in four million *OPV* vaccinations may result in paralytic disease in unimmunized contacts of recently-immunized persons, and rarely in the immunized persons themselves. For that reason, a sequential *IPV/OPV* vaccine series is currently being considered nationally.

Health Education

Poliomyelitis is a potentially fatal, formerly epidemic, viral infection that has been virtually eliminated in the U.S., but not elsewhere in the world, with the advent of immunization.

Infectious Disease Guidelines for School Personnel

(continued)

Tinea Corporis (Ringworm)

Ringworm is a misnomer, it is not caused by a worm but by a species of fungus called dermatophytes. Tinea corporis can occur on any area of the body not covered by hair. Scalp infections are called tinea capitis. Ringworm begins as a small red bump or papule which spreads outward, so that each affected area takes on the appearance of a red, scaly outer ring with a clear central area. The lesions are frequently itchy and can become infected if scratching is excessive. Transmission is generally by direct contact with a human or animal source.

Incubation Period

Not known.

Period of Communicability

Duration of skin lesions.

School and Nurse Responsibilities

- Ringworm is not a reportable illness.
- The affected child should be referred to a physician so that proper treatment can be instituted.

Control of Spread

No special measures are necessary; the child may stay in school.

Future Prevention

None available.

Health Education

Ringworm occurs in warmer climates or during warmer months in more temperate areas. It is not particularly dangerous, has no unusual long-term consequences, and can generally be treated quite effectively with topical preparations (e.g., Tinactin).

Infectious Disease Guidelines for School Personnel

(continued)

Rubella (German Measles, Three-Day Measles)

Rubella is a mild illness caused by a virus. Its importance lies not in the problems it causes for affected children, but rather in the significant congenital defects it may cause in infants whose mothers were exposed during the first 12 weeks of pregnancy. The first signs of the childhood illness are usually swollen glands, usually at the back of the skull and behind the ears, followed by a rash, usually consisting of isolated pink spots that appear first on the face, then spread rapidly to the trunk, and out to the forearms, hands, and feet. Fever and other symptoms are usually absent or mild. Transmission is usually from nasopharyngeal secretions of infected person. Infection can be completely asymptomatic, but individuals with subclinical rubella can still infect others.

Period of Communicability

14 to 21 days, usually 17 days.

School and Nurse Responsibilities

- Suspected rubella should be reported to the local health department by name, address, and telephone number of the suspected case.
- Any individual in whom rubella is suspected should be referred to a physician.

Control of Spread

Isolation of the affected individual is not essential, except in hospitals or where there is possible contact with pregnant women. Children may return to school five days after the rash first appears.

Future Prevention

A live rubella virus vaccine is routinely given at 12 to 15 months, in combination with measles and mumps vaccine (MMR). A second MMR is recommended at age 4 to 6 or 11 to 12 years. Some states require two MMRs of seventh-graders. Rubella immunity is particularly important to women of child-bearing age.

Health Education

Rubella outbreaks are especially significant because they increase the exposure of susceptible women of child-bearing age. Exposed pregnant women, especially those in the first trimester, should be counseled to get a test for rubella susceptibility and advised according to the results.

Infectious Disease Guidelines for School Personnel

(continued)

Scabies

Scabies is a skin infestation caused by the burrowing itch mite (*Sarcoptes scabiei*), and is extremely common among children. It is characterized by red papules, vesicles, and linear streaks which are burrows containing the mites and their eggs. Scabies is accompanied by itching, particularly at night. Lesions are most common in the webs between fingers, heels of the palms, wrists, armpits, buttocks, genitalia, and elbows. Nipples may also be affected in older females. Scabies is transmitted by direct physical contact with an affected individual.

Incubation Period

Four to six weeks in the first infection, only a few days in subsequent infections.

Period of Communicability

Duration of the disease, until mites and eggs are destroyed by the first treatment.

School and Nurse Responsibilities

Referral to a physician for diagnosis and treatment and suspected cases.

Control of Spread

None available, although some people feel all family members should be treated. Infected child may return to school following the initial treatment.

Future Prevention

None available.

Health Education

Scabies is a common problem and, other than the itching it causes and the possibility that the lesions may get infected, it is not terribly serious. Presence of scabies for the first time does not necessarily indicate poor hygiene. If repeated infections occur, despite proper therapy, an investigation for unrecognized cases among companions or household members should be undertaken. Lotions containing permethrin are preferred due to the decreased risk of neurotoxicity. Clothing and bed clothes should be well laundered. The mite does not reproduce or survive very long off the human host so environmental objects are not a source of infestations. Insecticide treatment of the home is not indicated.

Infectious Disease Guidelines for School Personnel

(continued)

Sexually Transmitted Diseases

Over 16 communicable diseases are now recognized as being sexually transmitted diseases (STDs). The following outline of agents, clinical presentation, presumptive diagnoses, and complications covers only those most prevalent, situations a school nurse is more likely to be confronted with. Other STDs include chancroid, hepatitis B, cytomegalovirus, granuloma inguinale, molluscum contagiosum, lymphogranuloma venereum, scabies, and an assortment of enteric infections (covered under Infectious Diarrhea).

Especially in girls, teens have very high rates of STDs. The possibility of sexual abuse must especially be considered when infections occur in prepubertal children and must be reported to appropriate authorities.

School and Nurse Responsibilities

- Referral to physician or public health clinic mandatory.
- Notification of parents is not required.
- Report to local health department mandatory for gonorrhea within seven days and syphilis within one.

Future Prevention

No vaccines are available.

Control of Spread

- STDs require close, intimate, physical contact, virtually always of a sexual nature, for transmission. No environmental interventions or exclusions are warranted.
- Patients should be examined and treated as soon as the diagnosis is confirmed to prevent complications.
- Sexual activity with untreated partners should be avoided.
- Interview of patient and notification of sexual contacts for prophylactic treatment by public health officials is very important.
- General education of STD prevention is advocated as part of health, family living, science, or sex education classes.

Infectious Disease Guidelines for School Personnel *(continued)*

Sexually Transmitted Diseases *(continued)*

Chlamydia

Chlamydia is caused by chlamydia trachomatis, an obligate intracellular bacteria. Chlamydial infections are the most frequent bacterial STD in the U.S. The majority of chlamydial infections are asymptomatic and are detected through screening tests. Symptoms of chlamydia, when present, are similar to those of gonorrhea. Women may have a mucopurulent cervical discharge and cervical friability (easily induced bleeding). Men may have urethritis (NGU) characterized by a whitish or clear discharge and dysuria.

Complications of chlamydia in women include pelvic inflammatory disease (PID) leading to ectopic pregnancy, infertility, and chronic pelvic pain. In men, chlamydia may cause epididymitis. Treatment is with doxycycline or azithromycin.

Genital Herpes

Caused by herpes simplex virus (HSV) types 1 and 2, DNA viruses which cannot be distinguished clinically. Genital herpes is a viral disease that may be recurrent and has no cure. Single or multiple vesicles appear anywhere on the genitalia. Vesicles spontaneously rupture to form shallow ulcers which may be very painful. Lesions resolve spontaneously with minimal scarring. The first occurrence is termed initial infection (mean duration of 12 days). Subsequent, usually milder occurrences are termed recurrent infections (mean duration 4.5 days). The interval between clinical episodes is termed latency. Viral shedding occurs intermittently during latency and sexual transmission of HSV may occur during these times. When typical genital lesions are present or a pattern or recurrence has developed, herpes infection is likely.

Complications include central nervous system involvement, the development of lesions at extragenital sites, and fungal superinfection are the most frequently encountered complications.

Infectious Disease Guidelines for School Personnel *(continued)*

Sexually Transmitted Diseases *(continued)*

Genital Warts

Caused by the human papilloma virus (HPV), a small slowly growing DNA virus belonging to the papovavirus group. Genital warts present as single or multiple soft, fleshy, papillary or sessile, painless growths around the anus, vulvovaginal area, penis, urethra, or perineum. Genital warts are generally benign growths that cause minor or no symptoms aside from their cosmetic appearance. A diagnosis may be made on the basis of the typical clinical presentation.

Some types of HPV are associated with cervical dysplasia and cancer; however, these do not usually cause genital warts. The goal of treatment is removal of warts, not the eradication of HPV. No therapy has been shown to eradicate the HPV. Treatment regimens include cryotherapy with liquid nitrogen, podophyllin, trichloroacetic acid, and electrocautery or electrocoagulation.

Gonorrhea

Caused by *Neisseria gonorrhoeae*, a gram-negative bacteria. When symptomatic, men usually have dysuria, increased frequency of urination, and purulent urethral discharge. Women may have abnormal vaginal discharge, abnormal menses, dysuria, or be asymptomatic. Anorectal and pharyngeal infections occur and may be symptomatic or asymptomatic. 10 to 20% of women develop pelvic inflammatory disease (PID) and are at risk for its sequelae. Men are at risk for epididymitis. Asymptomatic men may be the source of infections in women that progress to PID without suspicion of gonorrhea. All infected untreated persons are at risk rarely for disseminated gonococcal infection (including septicemia, arthritis, dermatitis, meningitis, and endocarditis).

The treatments of choice for uncomplicated gonorrhea are ceftriaxone (IM), cefixime (orally), ciprofloxacin (orally), or ofloxacin (orally).

Infectious Disease Guidelines for School Personnel (continued)

Sexually Transmitted Diseases (continued)

Nongonoccal Urethritis (NGU)

Caused by chlamydia trachomatis, ureaplasma urealyticum, or other assorted agents like HSV, but rarely. NGU is a syndrome of urethral inflammation in males, not caused by gonococcal infection. Men usually experience dysuria, frequency of urination, and mucoid to purulent urethral discharge. Some men have asymptomatic infections. Men with typical clinical symptoms are presumed to have NGU when their gonorrhea tests are negative and they have WBCs on a stained smear of the urethral discharge. Untreated infections in men can result in urethral strictures, prostatitis or epididymitis.

Female sexual partners of men with chlamydia NGU are likely to have chlamydia endocervicitis. The treatment for NGU is doxycycline.

Pelvic Inflammatory Disease (PID)

Neisseria gonorrhea and chlamydia trachomatis are implicated in the majority of cases. Microorganisms that can be part of the vaginal flora also can cause PID. PID comprises a spectrum of inflammatory disorders of the female upper genital tract. The patient may present with pain and tenderness involving the lower abdomen, cervix, uterus, and adnexa, possibly combined with fever and commonly with irregular bleeding. The diagnosis is more likely if the patient has multiple sexual partners, a history of PID, uses an intrauterine device (IUD), or is in the first five to ten days of her menstrual cycle.

Women who have the typical clinical presentation are presumed to have PID if other serious conditions, such as acute appendicitis or ectopic pregnancy, can be excluded.

Potentially life-threatening complications include ectopic pregnancy and pelvic abscess. Other complications are involuntary infertility, recurrent PID, chronic PID, chronic abdominal pain, and pelvic adhesions.

Treatment may require hospitalization for intravenous antibiotics in some patients, outpatient treatment requires a regimen of multiple antibiotics.

Infectious Disease Guidelines for School Personnel (continued)

Sexually Transmitted Diseases (continued)

Pubic Lice

Caused by *phthirus pubis* (pubic or crab louse), a grayish ectoparasite that is one to four mm long with segmented tarsi and claws for clinging to hairs. Symptoms range from slight discomfort to intolerable itching. Patients also commonly notice lice on pubic hair. A presumptive diagnosis is made when a patient with a history of recent exposure to pubic lice has itchy erythematous macules, papules, or secondary excoriations in the genital area.

Treatment is lindane shampoo or permethrin crème rinse. Bedding and clothing should be decontaminated (machine wash or machine dry using heat cycle).

Syphilis

Caused by *treponema pallidum*, a spirochete with 6 to 14 regular spirals and characteristic motility. Syphilis is a systemic disease with has three stages:

- Primary
 - ↳ The classical chancre (ulcer) is painless, indurated, and located at the site of exposure. All genital ulcers should be suspected to be syphilitic.
- Secondary
 - ↳ Patients may have a highly variable skin rash, mucous patches, condylomata lata, lymphadenopathy, or other signs.
- Latent
 - ↳ Patients are without clinical signs, but have positive serologic blood tests. Both latent syphilis and congenital syphilis are complications since they are preventable with prompt diagnosis and treatment of early syphilis. Sequelae late syphilis include neurosyphilis (general paresis, tabes dorsalis and focal neurologic signs), cardiovascular syphilis (thoracic aortic aneurism, aortic insufficiency), and localized gumma formation.

Treatment is with intramuscular benzathine penicillin.

Infectious Disease Guidelines for School Personnel (continued)

Sexually Transmitted Diseases (continued)

Trichomonas

Caused by trichomonas vaginalis, a motile protozoan with an undulating membrane and four flagella. Women typically have a malodorous, yellow-green vaginal discharge with vulvar irritation. Men are almost always asymptomatic.

Treatment is with metronidazole.

Health Education - Behavioral Messages for STDs

- Understand how to take any prescribed oral medications. If tetracycline (doxycycline) is prescribed, take it one or two hours after meals and avoid dairy products, antacids, iron, other mineral-containing preparations, and sunlight.
- Refer sexual partners for examination and/or treatment.
- Avoid sex until patient and partners are cured.
- Return early if symptoms persist or recur.
- Abstain from sex or use condoms to prevent future infections.

Infectious Disease Guidelines for School Personnel

(continued)

Streptococcal Sore Throat

An acute syndrome with fever, exudative tonsillitis or pharyngitis, and tender cervical lymph nodes. Streptococcal sore throat can occur with very few symptoms; all sore throats resembling strep throat are not due to strep. Scarlet fever is the combination of a streptococcal sore throat and a skin rash caused by a toxin produced by the strep organism. The rash usually appears on the neck, chest, groin, and axilla. It usually does not involve the face and characteristically spares the area around the mouth and inside of the elbow. Scarlet fever is no more severe or dangerous than a strep throat without a rash. Streptococcal disease is usually transmitted via airborne droplets.

The primary concern regarding strep is the risk of rheumatic fever, which is markedly reduced by prompt treatment with penicillin or other appropriate antibiotics.

Incubation Period

Usually one to three days.

Period of Communicability

If treated, will last less than 24 hours. Untreated children will remain infectious as long as they are ill, which may be for several weeks, usually only three to seven days.

School and Nurse Responsibilities

- Report to local health department whenever clusters of strep illness occur as evidenced by increased absenteeism and/or increased numbers of symptomatic children.
- Children with symptomatic sore throat and fever, symptomatic children with positive throat cultures, and children with unexplained fever over 101° F should be referred to a physician.
- In general, a child without symptoms should not be cultured. Conversely, a child who is ill enough to warrant culturing should be sent home for his or her own good and for the good of the child's classmates.

Control of Spread

Symptomatic children with positive cultures should be excluded until treatment is obtained. Children should be able to return to school after 24 hours of appropriate treatment. Parents should be urged to seek treatment for symptomatic, culture-positive children.

Infectious Disease Guidelines for School Personnel (continued)

Streptococcal Sore Throat (continued)

Control of Spread

- Symptomatic children with sore throat and/or fever should be cultured and, if culture is positive, treated appropriately by a physician
- As long as a child is asymptomatic, regardless of a positive throat culture, he or she need not be excluded from school.
- Epidemic strep infection with significant increases in numbers of sore throats or increases above normal school absenteeism should be referred to the local health department for epidemiologic investigation.
- Only symptomatic family contacts of a strep throat case should be cultured, unless there is a family history of rheumatic fever or living conditions which might increase the risk (i.e., extreme crowding, dampness, etc.).
- No follow-up throat culture is necessary in an otherwise normal child if that child received adequate treatment (a full 10-day course of oral antibiotics or a long-acting injection). If there is evidence of suboptimal antibiotic therapy, a follow-up culture may be indicated at the discretion of the physician.

Health Education

Streptococcal sore throat can lead to rheumatic fever. However, evidence suggests that the true incidence of rheumatic fever as an aftermath of non-epidemic strep infection is very low in many states.

Routine screening of classrooms to find strep carriers is not justified unless epidemiologic evidence of an ongoing strep infection is apparent as determined by local public health officials. In any classroom, the prevalence of positive throat cultures can vary from 5% to as high as 40% without any illness being apparent. The risk of exposing a child to penicillin unnecessarily and possibly setting up penicillin sensitization in that child may be a greater risk than that of an asymptomatic strep carrier acquiring rheumatic fever.

Infectious Disease Guidelines for School Personnel

(continued)

Tuberculosis

A chronic bacterial disease which may affect all parts of the body, most commonly the lungs. A primary infection usually goes unnoticed clinically, but sensitivity to tuberculin protein (skin tests) usually appear within three to six weeks following primary infection. A serious outcome is more frequent in infants and young children than in older adults. After primary infection, lesions may become inactive or progress to active pulmonary tuberculosis. Tuberculosis transmission is via airborne droplets.

Incubation Period

4 to 12 weeks, at which time primary lesion appears.

Period of Communicability

Since transmission is airborne, persists as long as living tubercle bacilli are being discharged, usually by coughing. Appropriate chemotherapy can reduce communicability to several weeks.

School and Nurse Responsibilities

- Report to local health department mandatory for active or suspect cases.
- Referral to physician mandatory for suspect or confirmed cases.

Control of Spread

- Active cases should be under therapy and cleared by private physician or public health official before return to school.
- Recent skin test converters should have a chest X-ray and either physician or public health consultation as to whether chemotherapy is indicated. Asymptomatic children should not be excluded solely on the basis of a positive skin test.

Future Prevention

- No immunization recommended in U.S.
- Chemoprophylaxis (isoniazid and pyridoxine) is recommended for infected persons who have no evidence of active disease.

Health Education

Once thought to have been nearly eradicated, tuberculosis incidence is now on the rise. While most cases can be treated with inexpensive antibiotics, an increasing number of people are being infected with drug resistant strains of TB.



Module C Transparencies

Module C: Functions of the Body's Systems

SgHlthC-T1



- ***Identify body systems and symptoms that require referral to the school nurse***
- ***Identify guidelines related to infectious diseases in school-age children.***

The Body's Systems

SgHlthC-T2



- *Cardiovascular and Respiratory System*
- *Musculoskeletal System*
- *Skin and Hair System*
- *Digestive and Renal System*
- *Central and Peripheral Nervous System*
- *Immune System*

The Cardiovascular and Respiratory System

SgHlth-T3



Cardiovascular

- *Pumps blood throughout the body.*

Respiratory

- *Exchanges oxygen and carbon dioxide.*

The Musculoskeletal System

SgHlthC-T4



Muscles

- *Provides the body with strength and mobility.*

Skeletal

- *Provides structure for the body, the frame.*

The Skin and Hair System

SgHlthC-T5



- *Protects body (barrier) and maintains warmth.*

The Digestive and Renal System

SgHlthC-T6



Digestive

- *Turns food and fluids into fuel for the body.*

Renal

- *Maintains proper fluid levels for the body.*

The Central and Peripheral Nervous System

SgHlthC-T7



- *Controls overall body function, movement, and behavior.*
- *Sense of smell, taste, hearing, feeling (touch) are connected to this system.*

The Immune System

SgHlthC-T8



- *Protects the body from disease.*

Significant Health Support Needs Reference List

Significant Health Support Needs Academy Reference List

American Federation of Teachers & AFL-CIO. (1992). *The Medically Fragile Child in the School Setting: A Resource Guide for the Educational Team*.

Colorado Department of Education (CDE) and Colorado Department of Public Health and Environment (CDPHE). (1995). *Procedure Guidelines for Health Care of Students with Special Needs in the School Setting*. Denver, CO.

Colorado Department of Public Health and Environment. (1996). *Emergency Care Guidelines for School Personnel*. Denver, CO.

Colorado Department of Public Health and Environment, Division of Disease Control and Environmental Epidemiology. (1996). *Infectious Disease Guidelines for School Personnel*. Denver, CO.

Ball, Jane & Bindler, R., *Pediatric Nursing: Caring for Children*, 1995. Norwalk, Appleton, Lange.

Rules of the Colorado Board of Health Pertaining to the Immunization of Students Attending School. (1997). CCR-1009-2.